

CLINICAL MEDICINE AND SURGERY



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• LEADING ARTICLES •

	PAGE
Psychoallergy in General Practice - - - -	149
Insomnia - - - - -	152
Treatment of Dysmenorrhea - - - - -	154
Uncinariasis - - - - -	157
Morphine Addiction - - - - -	159
Foot — Physical Therapy Opportunity - - -	161
Injection Treatment of Hernia — Part III - - -	163
Editorials - - - - -	145

• COMPLETE TABLE OF CONTENTS ON ADVERTISING PAGE FOUR •



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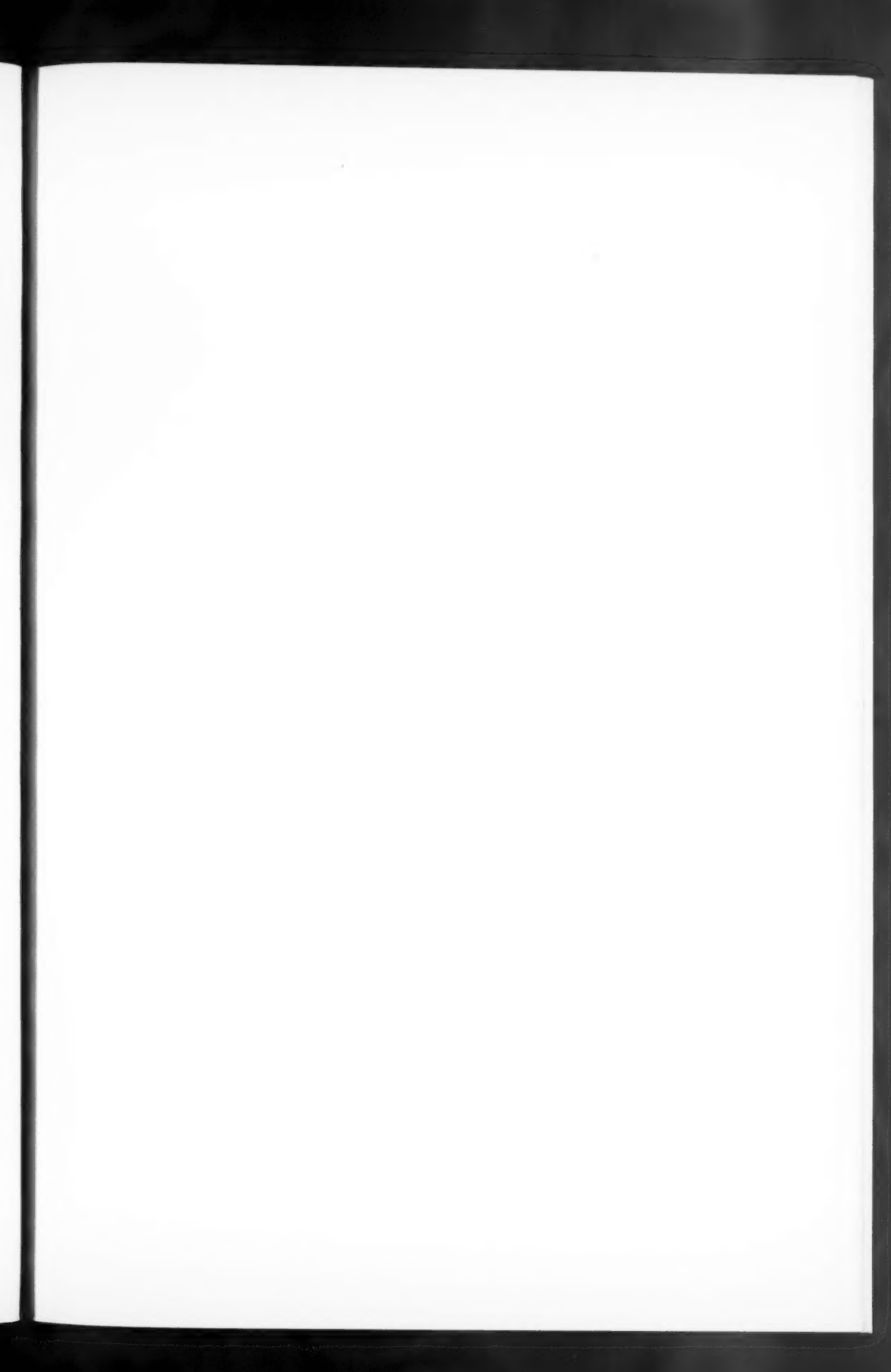
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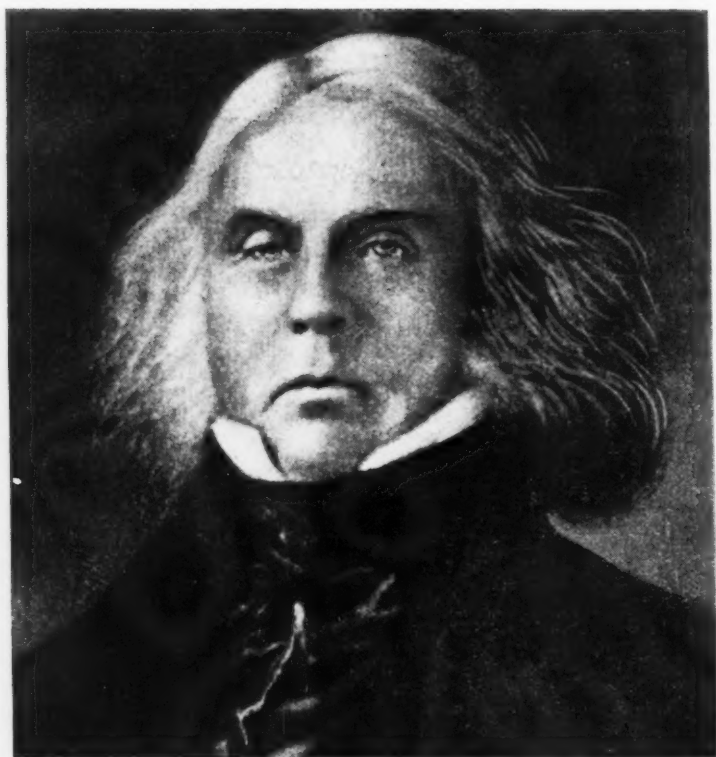
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DR. JOHN McLOUGHLIN

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CLINICAL MEDICINE AND SURGERY

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VOLUME 44

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EDITORIAL

Dr. John McLoughlin

"The White-headed Eagle," Emperor of the West

WHEN one talks of eagles and emperors, it requires, somehow, a rather active imagination to connect such titles with the idea of a medical man, because, perhaps, in our day, the problems of the physician are so strictly personal, and the field of his activities is, unfortunately, so closely circumscribed. It has not, however, always been so, and the tale of the redoubtable Dr. John McLoughlin is that of another breed of squirrel.

John's family background was not such as would have led any perspicacious individual to prophecy for him a modest and peaceful career. His father was an Irishman and his mother was a Fraser—half Canadian French and half Scotch. He was born, in 1784, at Riviere du Loup, 120 miles down the St. Lawrence from Quebec.

In spite of his pugnacious antecedents and his rather wild early environment, John was a serious-minded and religious lad (a Roman Catholic), and no one was greatly surprised when he yielded to the persuasion of his maternal uncle, Dr. Simon Fraser, and undertook the study of medicine at the early age of sixteen years. After a period of study in Scotland, he began his career as a physician, and practiced for a while in Montreal, but his heart was never in it, as he was not a city man at all and the pioneer blood in him was calling.

That call was reenforced and vocalized by

another maternal uncle, Alexander Fraser, who, the same year that John was born, had assisted in the organization of the North West Company—a group of men who purposed to play against the powerful Hudson's Bay Company for the rich stake of the Canadian fur trade.

Through Uncle Alexander's wire-pulling, the youthful Dr. McLoughlin, then only twenty years old, was appointed resident physician at the Company's chief depot and factory, Fort William, on Lake Superior, and thus entered upon one of the most adventurous (and, in its outcome, tragic) careers which has ever fallen to the lot of a medical man.

The personal force, business acumen, and knowledge of men possessed by the young doctor soon led him into wider fields than merely caring for the illnesses and injuries of the rough trappers and traders and the even rougher Indians, and he rapidly progressed to the position of chief trader of the Post, where he made such a reputation for himself that, when the Hudson's Bay Company and the North West Company patched up their business rivalry in 1820, McLoughlin went to England as a representative of the latter outfit, and on his return, as a Hudson's Bay Company man, was made chief factor at Fort Francis, on the Lake of the Woods.

It was here that he came in contact with

Governor George Simpson, head of the Hudson's Bay Company, who had some big and bold ideas, and promptly recognized that the still-young medicus had what it was going to take to carry them out.

The Oregon country was then held jointly by Great Britain and the United States, but the American, John Jacob Astor, had failed to make a big thing of the fur trade in the Columbia River region and his post, Astoria, had fallen into the hands of the Hudson's Bay Company. Simpson's plan was to seize the vast empire of the Pacific Northwest for Great Britain, and make McLoughlin its emperor. And he did it!—for a while.

In 1824, Dr. McLoughlin moved his headquarters up the river from Astoria and established Fort Vancouver, where he set up his state as a wilderness king, whose word was absolute law over an empire which extended along the Pacific coast from California to Alaska, and as far east as the Great Salt Lake. Here he ruled sternly, but justly, over the turbulent white men and the barbarous red ones, so that they loved him as much as they feared him, and the Indians, because of his shock of snowy hair, called him the "White-Headed Eagle."

One seemingly trivial incident of his reign, which later became of great importance, occurred when Capt. Aemilius Simpson, of the British Navy, was dining with "Emperor John," and happened to recall that, at his last dinner party in England, a young lady had given him the seeds of an apple she was eating and told him to plant them in the new country. The Doctor turned them over to the post gardener, who planted them under glass, and thus laid the foundation of the apple industry of Oregon. One of the original trees is still standing—110 years old—and bearing fruit.

But what more tragic than a king deprived of his kingdom?

The hardy and energetic Yankees began to trickle into the Northwest, first as trappers and traders; then missionaries; then settlers, and began to compete with the British. Because Dr. McLoughlin was a Christian and a religious man, he could not see these people butchered by the Indians if he could prevent it (and he usually could), nor permit them to starve while he had personal means to give them the necessities of life. And because he was a physician, he would not let them die of sickness and injuries from which his skill and training could save them.

This kindness on his part was contrary to the policy of his superiors in the Hudson's Bay Company, who wanted that territory for themselves, so, in 1845, they forced him into a "retirement" which was practically dismissal.

He then turned to the Americans, whom he had befriended, expecting to be welcomed, but met with a cold reception, because he was still a British citizen (he took out American citizenship papers in 1851, but they made it hard for him), and because his Christianity was of the Romanist variety, while most of them were protestants. So he found himself in the terrible position of a man without a country, and it is little wonder that, when his life came to a close, in 1857, he was an embittered old man of 73 years—an ex-emperor with no one to do him homage.

As it, unfortunately, happens so frequently, the man of enormous powers and penetrating vision is not given his true value in his lifetime, and it has taken a couple of generations for the people of the United States to become aware of the fact that this remarkable physician saved an immense and highly valuable piece of our country for us. He is now hailed as the "Father of Oregon," and in Vancouver, Washington there is an inconspicuous monument commemorating him—with his name misspelled!

However, he had the joy of doing an incomparable piece of work, and as people awake to that fact he will be more and more securely placed in the glorious company of our national heroes and among the outstanding members of the profession he adorned.

The essence of virtue is action in accordance with right reason, in absolute disregard of one's own feelings or desires.—*U. B. Papers.*

Tropical Diseases

WITH conditions in various European countries and in Asia more or less turbulent, as they have been for some time, especially since the trouble began in Spain, a good many people who have formerly done their traveling across the water have been doing a bit of investigating of the Western Hemisphere; and the opening of a practicable automobile highway to Mexico City has resulted in popularizing our sister republic to the south as a vacation resort. The establishment of regular air communication with South America and the West Indies has brought these more or less exotic lands almost to our back door.

These developments are of very definite professional interest to the physicians of the United States, because rapid methods of transportation may readily move carriers and vectors of disease from places where they are common to localities where they are so rare as not to be considered by the local practitioners, so that they might develop and spread before the danger was recognized.

A Mexican, in the incubation period of smallpox, might easily drive into Kentucky, Tennessee, or even Ohio, before his eruptions appeared, thus exposing many unsuspecting persons to the disease. An airplane might readily carry, from Brazil, not only an incipient case of yellow fever, but also a number of infected *Stegomyia* mosquitoes, ready to feed upon and infect innocent citizens of Baltimore or Philadelphia. Of course, with our health officers keenly on the job, as they generally are, the probability of such transfer of diseases is not very great, but indubitably there is such a possibility.

On the other hand, the Latin American countries are strengthening their internal sanitary arrangements, so as to reduce disease within their own borders and to protect themselves from those of our northern diseases to which they have little immunity, such as measles and whooping cough.

The moral, for American physicians, is that they must cease to regard so-called tropical diseases as nosologic curiosities, and must acquaint themselves with the symptoms of these conditions and be on the watch for them in all dubious or suspicious cases. Most medical schools, notably Tulane and Harvard, are strengthening their courses in tropical medicine, and it might be well to brush up with a bit of graduate study along this line.

To be guided by reason is to obey the laws of nature.—ERNEST WOOD.

Birth Control Is Eugenic

ONE of the stock arguments advanced against birth control is to the effect that the more intelligent and capable people make use of contraceptive information to limit their families, while the incompetent, careless, and unfit members of the community (such as those on our American dole, euphemistically called "relief") continue to breed like rabbits, and are thus liable to affect the social balance unfavorably.

Evidence is accumulating which tends to prove that this is an argument *in favor* of the universal dissemination of a knowledge of the technics of contraception, rather than the re-

verse, because, in populations or groups where this knowledge is more or less evenly distributed among all classes of the population, it is found that the most highly educated and affluent couples are producing the largest families.*

In Sweden, where no restrictions are placed upon the giving of contraceptive advice and instruction, Edin showed, ten years ago, that fertility is 25 percent higher among the upper classes than it is among the industrial workers, and that, in the upper classes themselves, the size of the families is in direct proportion to the size of the family incomes, so that those in the higher financial brackets have a birth rate 50 percent greater than those in the lower brackets. Moreover, Hutchinson recently reported that, in 6,629 Stockholm families, the birth rate where the parents had a university education was 50 percent higher than in families where the parents had gone no further than the public schools.

In the United States, also, Huntington and others have shown that, in a group of college graduates, where the opportunities for obtaining contraceptive information were presumably equal, the most generally successful one-tenth of the group had families averaging 2.4 children, while the families of the least successful one-tenth averaged only 0.8 children.

As long as contraceptive advice and instruction are "bootlegged" or given furtively, so that such information is available only to those who can afford to pay fairly high fees for it, and is denied, directly or by implication, to the relatively ignorant and incapable members of the community, the results to society can scarcely fail to be dysgenic. But the figures just quoted are rather conclusive evidence that, when contraceptive information is made freely and readily available to all classes of society, those persons on the highest educational, intellectual, and financial levels will assume the leadership in differential fertility and bear the largest number of children, thus having a direct and highly beneficial effect upon the social eugenic status of our nation.

Do not complain because the rosebush has thorns; rejoice that the thornbush bears roses.—ARABIAN PROVERB.

Only two classes of men never change: The wisest of the wise and the dullest of the dull.—CONFUCIUS.

*The reports here mentioned are abstracted, with specific references, in *The Journal of Contraception* for October, 1936, on page 164.

Shifting the Public Health Service

A WELL-founded rumor has reached us that a plan is on foot in Washington to remove the United States Public Health Service from the administrative control of the Treasury Department, under which it has long functioned with great success, and place it in the proposed new Bureau or Department of Public Welfare, which is being actively advocated.

Under the present political setup, it seems decidedly probable that this new Department will be established; but if the Public Health Service is transferred to it, the result is liable to be a national calamity.

Among all the Government agencies, none has functioned more efficiently or produced more benefit for the people of the entire nation, than the Public Health Service. One reason for this desirable state of affairs is that its officers have been appointed and promoted purely on the basis of personal competence and meritorious service, unhampered and uncorrupted by political influence or by departmental interference, because the officials of the Treasury Department have exercised only budgetary control over the Service, and have recognized their incompetence to dictate any of its policies or activities.

On the other hand, the various "Public Welfare" departments and agencies, as now constituted, are largely staffed and conducted on a political basis, so that any serious efforts in the line of preventive medicine would, to

a greater or less degree, defeat their political purpose by diminishing the amount of work which they could claim as their prerogative, and thus reducing the ostensible reasons for their existence.

To introduce politics into the Public Health Service would be so disastrous that the mere proposal is a matter of direct, personal interest to every citizen, and especially to all physicians, who, as a class, are best prepared to estimate the grave results which would be practically certain to follow.

With these ideas in mind, various state and County Medical Societies are passing resolutions protesting against the removal of the Public Health Service from the jurisdiction of the Treasury Department to any other Department or Bureau of the Federal Government, unless it be to a Department of Public Health, should such be authorized.

It would be well if every medical society in the country would pass similar resolutions, and submit them to the President, to every Senator and Representative in the Congress, to the Surgeon General of the Public Health Service, and to the Directors of Public Health of all the states. We shall be glad to send a suggestive outline of such resolutions to the president or secretary of any medical society that may be interested.

It would also be well for every individual physician to write to his own representatives in the Congress, expressing his personal opinions on this important matter.

NEXT MONTH

Dr. Gerald A. Rau, of Two Rivers, Wis., will explain, in detail, how general clinicians and other physicians can increase their practice by treating minor skin lesions (corns, warts, tattoos, etc.) with bichloroacetic acid.

Dr. Ellis Powell, of West Monroe, La., will set forth, in a highly logical manner, the probable direct relationship between hyperinsulinism and the epilepsies.

Dr. Clifford F. Dowkontt, of New York City, will stress the psychic importance of enlarged and pendulous breasts, and suggest measures for their restoration to normal contours by surgical measures.

The fourth and last part of Dr. A. W. Dowson's article on the injection treatment of hernia will appear.

COMING SOON

"Some Unusual Skin Lesions" (illustrated), by Herman Goodman, B.S., M.D., New York City.

"Extensive X-Ray Burn of the Forehead and Scalp" (illustrated), by Michael L. Lewin, M.D., New York City.

LEADING ARTICLES

Psychoallergy in General Practice*

By Wallace Marshall, M.D., University, Ala.

THE general practitioner often wonders what can be gained from an intimate knowledge of the various psychiatric mechanisms. Psychiatry suggests to him the study of the neuroses and psychoses, which are difficult to treat and, consequently, are referred to psychiatrists, or are avoided as much as possible and are forgotten. The physician in general practice sees many patients whom he regards as "queer," "odd," or just "plain crazy." These he classifies as psychoneurotics and does what he can, in the limited time which is available, to pacify them until they feel the urge to make another office call.

The purpose of this paper is to discuss some of these clinical problems; furthermore, this matter will be presented from an unique and uncomplicated point of view, in an attempt to clarify and crystallize these underlying psychic mechanisms in terms of biology, through the theory of psychoallergy. In this manner, the rather mystifying nomenclature of psychopathology will be avoided. The concept of psychoallergy¹ propounds a correlating mechanism for the fields of psychology and biology; it operates through the laws of allergy, which parallel the phenomena observed in the field of psychology.

We are to think of various emotional setups, such as situations, objects, or actions, or even words of strong emotional content, as being potential psychoallergens. In other words, these agents seem to possess the property of precipitating an emotional flare-up in a person who has been sensitized to them previously. Some schools of investigators feel that the underlying mechanism is that of association, but it is my belief that the specificity of the reaction alone is enough to place it in the category of a specialized type of allergic reaction, which resembles those reactions observed in the field of physical allergy.

With this brief introduction, I shall discuss the two types of psychoallergic reactions which are observed clinically. These can be divided into normal and abnormal components. In the normal type, there are two kinds of reactions. The *nousic* type refers to the mental or the intelligence aspect, while

the *histic* type has to do with the response of tissues or organs. Thus, learning is a normal nousic reaction, and nausea, which results from perceiving disagreeable odors, is a normal type of histic reaction.

Of the abnormal reactions found in the psychoallergic patient, the nousic and histic types are also evident. There may be found, also, the mixed type, which is composed of elements found in both types of reactions.

Nousic and Histic Reactions

It is quite impossible to cover the psychosomatic relationships within this limited space, but a proper example of the nousic reaction will demonstrate this type of psychoallergy as observed in the general practice of medicine. To show how the process of sensitization may make an individual psychoallergic to a particular situation, I shall quote from a notation given to me by a student.

"Two weeks ago I received a letter reminding me that I had overlooked my insurance premium and that I had only two days left in the period of grace. Chagrin at this oversight and worry lest my check should not reach the home office in time, caused a good bit of unpleasant emotion.

"Last night someone mentioned the high insurance rate on automobiles. I had a sudden emotional shock, a rush of blood to the skin accompanied by a tingling sensation, and I asked, quite without forethought, for a change of subject."

This is an example of a nousic type of psychoallergic reaction, with minor histic components. The idea of a high insurance rate, brought up in conversation by his friend, served as the specific psychoallergen to cause this psychoallergic upset. The specificity of this stimulus is important, as no other subjects of the conversation, other than that pertaining to insurance, brought about the reaction.

To show the histic type of psychoallergy, I will draw upon the experience of a physician, who writes:

"When a child, I saw an infant injured severely. This child lost a great deal of blood while waiting for medical aid. The incident was an emotional shock to me, so much so that, when I saw blood escape from a minor cut, it was enough to nauseate me. This reaction persisted until I became a

*From the Department of Medicine, University of Alabama School of Medicine.

junior in my medical school, and it was difficult for me to rid myself of it. Furthermore, this reaction tends to return if I do not see surgery performed at fairly regular intervals."

This type of reaction is histic in nature, as the bodily response (that of nausea) is evident.

Kemp² states that objects, actions, or situations may exert conditioning influences upon individuals. These influences may become associated together, and the persons may react to them as pleasant or painful, moral or immoral, good or evil, etc. He speaks of these images as possessing qualitative stimuli, to which the person has become conditioned and which affect the nervous reflexes in a manner in proportion as they approximate the original stimulus.

According to our concept, this is true as far as it goes, but I think that these conditioning processes, which we term sensitizing factors or psychoallergens, do more than condition the individual; they may even change the neurokyme of the nerve cells, if the stimulation is of large caliber or if it is repeated at intervals. One remembers Crile's anoci-association in this connection, as pain, whether of emotional origin or not, can produce shock and is capable of causing degeneration of neural tissue. This has been proved experimentally.

When a psychoallergen is introduced to a person who has become sensitized previously to this type of emotional stimuli, and a state of psychoallergy already is present, an emotional upset takes place and is directly proportional, apparently, to the degree of psychoallergy which the patient possesses.

Cannon³ has called attention to the fact that, in modern life, infections have diminished and nervous strains have increased. These nervous strains produce definite effects upon the viscera which are innervated by the autonomic nervous system. In other words, psychoallergens have increased in numbers, due to the strain and stress of our modern era, and individuals are more apt to develop psychoallergic states more readily than was the case years ago.

If one wishes to observe an interesting histic example of the state of psychoallergy in so-called nervous patients, it can be done by looking for ischemic macules on the palms and dorsums of the hands. These spots come and go with the duration of the angiospasm which accompanies the phenomenon. Vasomotor instability tends to produce this condition, and this is the result of stress and strain on the nervous system. Furthermore, this clinical observation is accompanied, many times, by other symptoms and signs, most often by periodic insomnia and true sinus arrhythmia. When these are present, the

condition is known as the Marshall-White syndrome⁴.

This is a form of psychoallergic hypersensitivity and suggests to the examiner that such an individual possesses potentialities of an emotional explosion, if a specific psychoallergen is introduced. These patients are hypersensitive, and are usually emotionally inhibited individuals who are suffering from an unhappy environmental background. To use a common phraseology, they are the "easymarks" who shoulder the brunt of the work in the family because of their willingness, sincerity, and bigheartedness. Furthermore, they are apt to develop stammering or stuttering. These are the patients who lie awake in bed for hours at a time, can feel the blood vessels in their head beat, and continually think of things which should have been said to uphold their rights in matters of dispute and in embarrassing situations. These are the people who tend to say the wrong thing at the right time and who find solace in daydreaming.

Digestive and Metabolic Disorders

Emotional disturbances have a tendency to affect the digestive tract. Ulcers may develop as a result of a prolonged emotional upset. Pylorospasm seems to be the first stage of gastro-intestinal disorder in this type of pathosis. Hyperacidity is usually found along with this pylorospasm, which, if prolonged, may lead to erosion and then ulceration. Thus, psychic influences are capable of interfering with normal gastric rhythm, which, in itself, might be the primary morbid condition. Recurrent attacks may be brought about by business reverses, anger, and the like, according to Einhorn⁵.

Emotional conflicts may upset metabolic functions through psychoallergic states, according to this theory. Menninger⁶ studied 22 cases of mental disorder associated with diabetes, and found that diabetes may be the direct result of psychologic disturbances.

Much work has, of late, been done on Graves' disease. Conrad⁷ obtained a history of psychic trauma in 94 percent of her cases. This investigator feels that the conception of Graves' disease must be extended to include susceptibility to specific emotional traumas and characteristic personality patterns.

One of the most amazing conditions one sees, at times, is spurious pregnancy, or pseudocyesis. This is a condition observed in patients who may be nearing the menopause and may desire children greatly, but for one reason or another are unable to have them. These patients present most of the subjective symptoms of pregnancy, along with a marked increase in the size of the abdomen. This latter is due usually to the rapid and abnormal deposition of fat or to the presence of tympanites, occasionally ascites, and a

marked distention of the abdominal wall. The menses may become suppressed and, in some cases, the patient imagines that she feels life or may even feel the baby kick. This may be due to a marked contraction of the abdominal wall or intestines. The diagnosis is made by palpating a small uterus.

Usually these patients have been subject to much anguish in the failure to conceive, and they have heard many dramatic tales, related by their friends, who discuss, at length, the trials and tribulations of their gravid state. Consequently, such patients, with a spurious pregnancy, have developed a highly advanced psychoallergic state. The mere suggestion that they might not be pregnant after all, may throw them into a rage and may end in the dismissal of the attending physician.

Circulatory and Genito-Urinary Disorders

Arterial hypertension offers a great array of facts from investigations which have to do with the part the emotions play in the development of this disorder. It has been shown many times that psychic conditions have a great deal to do with the production of hypertension. This may be the result of a disturbance of the central nervous system, and is the expression of a disordered vasomotor system.

In surveying the literature concerning the effects of emotions in producing disorders of the genito-urinary and the reproductive systems, we find ourselves overwhelmed by the abundance of material available for discussion. The only procedure, which is feasible at this time, is to mention these conditions, some of which are nonspecific urethritis, cervicitis of virgins, gonophobia, syphilophobia, prostatitis, the etiology of various lumbar pains, pathology of the colliculus, leukorrhea, disorders of the libido, pruritus, dyspareunia, disturbances of menstruation, emotional production of abortion, emesis gravidarum, vaginismus, ejaculatio precox, and other related disorders.

Treatment

From the standpoint of therapy, an adequate understanding of the mechanisms is

a requisite for a sound understanding of the psychopathologic background; and a realization of the vast and highly important part played by psychoallergens is paramount, in order to understand why many patients act as they do. Furthermore, the application of common sense in the treatment of these cases, with a certain amount of interest and kindness on the part of the practitioner, will do much to effect an improvement in the difficulties which these patients suffer.

The psychiatrist attempts to desensitize a patient by making it possible for him to gain "insight" regarding his difficulties. The psychoanalyst obtains improvements by allowing the patient to introduce his own psychoallergens slowly over a long period of time; in this way, desensitization takes place, and improvement is noted. In some cases, the patient becomes worse if this process is speeded up, because he is given greater doses of these painful memories than he can handle and is unable to build up a resistance to the specific psychoallergens which have been responsible for the emotional upset, which some psychiatrists call "complexes."

It is no wonder that some patients, afflicted with the disorders here discussed, eventually consult questionable cultists, charlatans, or faith healers. It behooves the family physician to place these unfortunate persons under the care of a reputable specialist, if he does not wish to treat such cases himself, or feels unprepared to deal with them adequately.

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"PLANNED ECONOMY" AND INCOMPETENCE

When a labor union or a legislature orders that no more than so many bricks shall be laid a day; that employers shall choose, not the best type-setter, but the one who has been longest out of a job; that each man shall have the same wages, and that no man shall cultivate more than so many acres, or raise more than so many hogs or potatoes, and that you and I shall pay him, not for what he does do but for what he does not do, then that union or legislature is reducing us to our lowest common denominator of laziness, thriftlessness and incompetence.—CHANNING POLLOCK, in *American Mercury*.

Insomnia*

By Edward H. Ochsner, B.S., M.D., F.A.C.S., Chicago

INSOMNIA is defined as the inability to sleep adequately. It is one of the most common afflictions of civilized man. It may interfere with the growth and development of the infant in arms, retard the recovery of the medical and surgical patient, and torment the aged. It is increasingly common after the fourth decade of life. It may be so mild as to be simply a slight annoyance, or so severe as to actually endanger life. It is one of the most prevalent causes of the lack of both physical and mental maximum efficiency. It is unquestionably one of the most common causes of drug addiction.

Few persons seem to realize how necessary adequate, restful sleep is to good health. Of those who do recognize and appreciate the importance of undisturbed sleep, many find it difficult to secure the minimum amount necessary to insure the greatest possible degree of vitality and vigor. When a patient begins to complain of sleeplessness, the symptom should not be passed over lightly, but an effort should be made at once to ascertain its cause.

Although the mechanism of sleep is, even today, one of the least understood of the normal physiologic processes of the human body, we are familiar with a considerable number of the factors that cause sleeplessness and with some of the remedies that eliminate and overcome these sleep-disturbing influences.

I do not intend to go into a learned and detailed discussion of insomnia. This has been done many times. I merely wish to call attention to a few all-too-frequently-overlooked causes, and to suggest three simple remedies which I have found of value in the treatment of this condition.

Light Disturbs Sleep

Light is the cause of sleeplessness much oftener than is generally supposed. A light that is so faint as to be hardly noticeable to one person may disturb a more sensitive person's sleep. A mere crack under or over a door, which has on its other side a bright electric light, has often engendered the insomnia habit in a high-strung, nervous patient. In cities it is, of course, more often the glaring light from an electric street lamp or from an opposite apartment window, or the recurrent flashes from the headlights of passing automobiles. In the country the insomnia habit is often acquired during a series of bright, moonlight nights, particularly in the summer, when the shades and windows have

to be up in order to secure better ventilation.

A considerable number of patients themselves realize that light disturbs their sleep. When I was active in private practice I repeatedly observed how patients tried to obviate this difficulty. Quite often I have seen double shades over the windows in the bedrooms of light-sensitive patients, with the inner shade made of heavy black material. This effort at solving the problem is rarely entirely satisfactory. It is almost impossible to keep the light from filtering in at the sides, and streaks of light are quite as annoying to some patients as an intense glare is to others. In addition, drawn shades during the summer months seriously interfere with ventilation, and fresh air is absolutely necessary for refreshing, invigorating sleep.

As an illustration of how bright moonlight nights or the dawn light in the country often induce sleeplessness, I wish to relate the following case history:

On April 25, 1936, a well-nourished, robust suburbanite business man, with moderate chronic arthritis, consulted me. Among other symptoms he complained of sleeplessness, saying that, for the past month or six weeks, he had awakened every morning at about four o'clock and could not fall asleep again.

After questioning him about the way his sleeping room faced and about the way his window shades were arranged, I concluded that probably the early morning light was waking him at that hour. Instead of giving him some soporific or, what would have been just as bad, ignoring the complaint entirely, I advised him to place a fine, black-silk cloth over his eyes when he went to bed at night.

Eight weeks later he reported back at my office and showed me a little shade made of black silk that he had been able to purchase in a sporting-goods store. He said that the very first night he had used it he had slept until seven o'clock in the morning without waking at four o'clock as usual, and that since then he had had no further trouble with insomnia. His arthritis had in the meantime decidedly improved. Complete recovery from both acute and chronic affections is often unduly delayed and may actually be prevented by lack of sufficient sleep.

A snug, comfortable eye-shade, which will stay in place and will shut out all light effectively, answers three other valuable purposes: For campers and hunters who have to sleep in the open; for night workers who have to sleep in the day time; and for elderly persons who like to take a short nap after the noon-day meal, it is a great boon. Inci-

*Read before the North Central Illinois Medical Association, at Streator, Illinois, Dec. 1, 1936.

dently, I wish to observe that I do not know of any one thing that helps to keep elderly people so relatively young, alert and active as does an hour's complete relaxation, with a short nap, during the middle of the day.

The other common cause of insomnia that I wish to discuss in this paper is colonic stasis, with its resultant systemic absorption of toxic substances. In this condition I have found a dose of from one ounce to an ounce and a half of castor oil, given on retiring, a most valuable and practically never-failing remedy. The dose must be so adjusted that the patient will not have to get up during the night to evacuate his bowels. If the castor oil is properly mixed with beer foam it can be given so that the patient will not taste the oil, and if the patient is given half a dozen 5-grain tablets of sodium bicarbonate to dissolve in his mouth, one at a time, after he has swallowed the beer-foam-castor-oil mixture, he will not be annoyed by belching the oil. One of the few patients who in my experience refused to take castor oil was a brewer's wife. She refused, not because she could taste the oil, but because she was afraid the thought of it might give her an aversion to beer, which she greatly enjoyed. In this connection, one word of caution is necessary. Before using this remedy for insomnia one must, of course, make sure that the patient is not suffering from gallstones, appendicitis, or any form of pelvic infection.

When the cause of the insomnia has been discovered and removed, usually only half of the task is finished. In the patient whose history I have given, the desired result was surprisingly prompt, because he had suffered from sleeplessness only a short time. With those patients who have suffered from this condition for a long time the habit has become firmly established and simply removing the cause is rarely sufficient to insure a cure. It is at this point that the second error is often committed. One of the many hypnotic drugs is prescribed, and the patient is directed to take it every evening until the insomnia is cured. Then one of two things usually happens: Either the drug employed loses its effect; or the patient acquires a drug habit, which is far worse than the simple insomnia habit from which he suffered before he placed himself under the doctor's care.

Giving Barbiturates

After the cause has been eliminated, I have, for a number of years, employed a device which I have found most satisfactory for the cure of the simple, uncomplicated insomnia habit. It consists in giving the

appropriate dose (3 to 6 grains) of barbital,* as the condition may require, with a glass of hot milk, *two hours* before retiring, but with the explicit instruction that the remedy is not to be taken the second night if satisfactory sleep was obtained with the first dose, and never to take it two nights in succession if it has been effective the previous night, or to take it after going to bed. In this way the remedy does not lose its effect and the patient does not acquire the drug habit.

Some detailed explanation as to why these instructions are thus so explicitly given is usually indicated, in order that the patient may be induced to cooperate fully. It is surprising how well this plan usually works, after the cause of the insomnia has been eliminated. Some patients will have to take the barbitol only once. Most of them are entirely relieved of their sleeplessness after taking a few doses in the prescribed manner. Giving such detailed directions takes a little extra time and effort on the part of the physician but it is time and effort well spent. Two points I wish to repeat, because I believe they are important: One is that the barbitol should be given *two hours* before retiring, instead of one hour, as is advised in all the articles and textbooks on the subject that have come to my attention. The other is that habit plays a much more important rôle in chronic sleeplessness than is usually accorded it.

Michael Angelo once, very wisely, said, "Art consists in trifles; but art is not a trifle." Medicine being an art as well as a science, it behooves us to ponder well this saying. I have repeatedly made the observation that the men who are the most successful in the art (the practice of medicine) have at their fingertips many simple little devices that give comfort and relief to their patients. On the other hand, the ultra-scientific physician is frequently a practical failure because, too often, he is utterly incapable of appreciating the value of little details. Then there is the other type who considers himself too important to pay attention to details, wrongly thinking that making a great ado and using complicated procedures will enhance his reputation and renown. The foolish new-rich will fall for that sort of thing, but the wise middle class is rarely impressed.

Someone has recently suggested a ten-year moratorium on scientific discoveries, in order that wisdom, judgment, and morals might catch up with science. I would suggest a ten-year moratorium on new therapeutic remedies, particularly of the complicated synthetic type, in order that the well-tried and tested simple remedies may again come into their own.

2155 Cleveland Avenue.

*Note: In order that the patient may not know what he is taking, I prescribe the barbitol under its less commonly known name, diethylbarbituric acid.

Dysmenorrhea: A New and Effective Treatment

By Carl J. McKenna, M.D., West Hempstead, L. I., N. Y.

THE tremendous strides made by women in the professional and industrial fields in recent years, in a highly competitive world,

women either suffer from the disorders of menstruation, or are partially incapacitated by the disturbances of the oncoming menopause. This fact was proved indubitably by the experience of an industrial plant, which refused to recognize the disabilities of dysmenorrhea and attempted to force the women to work during their entire menstrual period. After fourteen days of this, the rest rooms were opened again and a nurse placed in charge for the sole purpose of administering

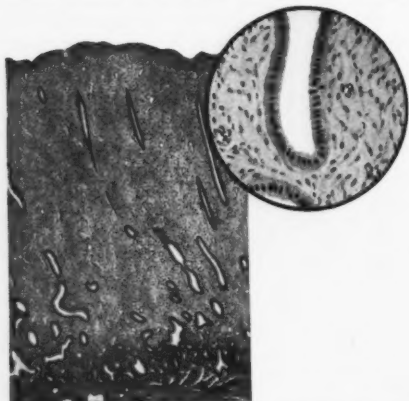


Fig. 1:—Resting Endometrium (between menstrual periods), showing the vascular layer and (in the circle, under high power) resting glandular cells.

have, naturally enough, focused attention on the physical handicaps that have in the past been borne by women in silence or with seldom-mentioned complaint. The greatest of these problems was, only within comparatively recent times, solved by the development of a suitable vulva pad for the catamenia. The remarkable fact is that no effort had been exerted in this direction before.

The next—of almost equal importance—has been the handicap of menstrual disability, due to either pain, lassitude, discomfort, headache, or neurosis. Relieving the pain was a comparatively simple matter, for a host of analgesics and sedatives was available; but efficiency is undoubtedly more or less decreased by cerebral sedation. The entire answer is, therefore, not in suppressing pain alone. The ideal relief from the menstrual disturbances is a treatment that, if continued, might effect a cure.

Morphine, codeine, phenobarbital, amidopyrine, and other synthetic drugs usually used for relief of pain, merely suppress the pain. They do not shorten the period of suffering; if their use is stopped the pain returns—obviously, a palliative type of treatment. Suffering patients deserve better than this, if such a treatment is available, and I believe that it now is.

In industrial medicine, the incidence of dysmenorrhea (in this term is included all the troublesome symptoms of menstruation) is high. Fully 70 percent of the employed

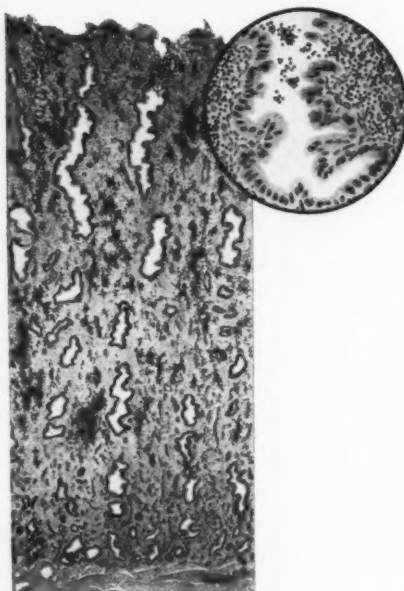


Fig. 2:—Menstruating Endometrium, showing marked increase in thickness and vascularization, with tissues full of extravasated blood. Glandular cells during menstruation shown in circle under high power.

to women during their periods of dysmenorrhea. A study of these women showed a wide variety of disabling symptoms, not limited necessarily to pain. Herein lies the great failing of analgesics—they provide relief *only* for the pain. There were, further, great discrepancies in the period of diminished efficiency, varying from two hours to 2½ days. In an organization employing many women, this loss of time is considerable.

The classification of dysmenorrhea into "primary" and "secondary" types seems to be the generally accepted one, supposedly in the belief that in the former no lesion is demonstrable as the cause of the dysmenorrhea;

CHART I

Case No.	Relief Obtained				Time Required for Relief				Monthly Dosage		Patient's Preference	
	Humulus Lupulus Compound		Analgesics		Humulus Lupulus Compound		Analgesics		Humulus Lupulus Compound	Analgesics	Humulus Lupulus Compound	Analgesics
	Yes	No	Yes	No	Hrs.	Mins.	Hrs.	Mins.	No. of Capsules	No. of Tablets		
1	x		x			12		35	3	12	x	
2	x		x			20	1	15	6	20	x	
3	x			x		10		0	6	14	x	Refused to take after 1st failure
4		x		x		0		0			Preferred gin and hot water.	
5	x			x		30		0	8		x	
6	x			x		15		0	8		x	
7	x		x			20		30	7	12	Didn't like Capsules	x
8		x		x		0		0			0	0
9	x			x		15		0	10		x	
10	x			x		18		0	4		x	
11		x		x		0		0			0	0
12		x		x				0			0	0
13	x		x			35	1	15	4	12		x
14	x		x			10		25	6	14	x	
15	x			x		30		0	8		x	
16	x		x			15		50	8	14	x	
17	x			x		20		0	5		x	
18	x		x			12		20	7	10	x	
19	x			x		20		0	7		x	
20	x			x	1	00		0	8		x	
21	x			x		20		0	9		x	
22	x			x		15		0	4		x	

while in the latter some surgical procedure is indicated. The usual failure to obtain permanent relief from any operation that does not involve removal of the uterus, is ample evidence that this classification is not wholly accurate. Replacing distorted uteri, cur-

ettage, amputation of the cervix, etc., while theoretically sound, often are disappointing in the results. And furthermore, the most accurately diagnosed cases of secondary dysmenorrhea, when operated upon and the abdomen opened, often reveal little if any

pathologic changes. In other words, the present classification of dysmenorrhea is still inadequate.

Any physician in constant observation of a large group of women is impressed by the habitual return of exactly the same symptoms at each menstrual period. The intermenstrual periods are perfectly normal, and the woman, happy and well, in a few hours is transformed into a suffering, incapacitated patient. What has happened?

The endocrinologists would have us believe there is always an insufficient amount of lutein or pituitary or corpus luteum hormone. If this is so, how can we account for the frequent failure of gland therapy in dysmenorrhea? Theoretically, as in cases of insufficient thyroid, supplying the necessary hormone should rectify the condition.

If, however, the cause is searched for in the uterus itself, under the microscope, the most revealing fact is found in the submucous layer, where the normal, contractile, smooth-muscle tissue is found. In the menstruating uterus this layer is found distorted and disintegrated by large capillaries and blood vessels. As the accompanying photomicrographs show, the submucosal smooth muscle has undergone a great change. To this point, then, must be directed our treatment for dysmenorrhea, remembering that the thickened vasculosa and mucosa means painful congestion and decreased muscular tension and rhythm. It is the irregular, arrhythmic, spastic contraction of the muscle layer that causes the dysmenorrhea, and the dysmenorrhea will continue until the thickened mucosa is cast off. Any drug which relieves this spasmodic condition and allays this congestion will relieve dysmenorrhea. As may be reasonably expected, no one drug could be found to accomplish both these purposes, for they are two distinct quasi-pathologic states.

Humulus Lupulus Compound

As suggested in the paper, "The Treatment of Dysmenorrhea Based on a New Theory as to Its Cause" (*Medical Record*, June 3, 1936), a compound containing *Humulus lupulus* extract, *Viburnum prunifolium*, and phenylethylmalonylurea was used in treating a series of 235 cases of dysmenorrhea, with very favorable results. The well-known soothing effects of *Humulus lupulus* on the inflamed genito-urinary tract, combined with the anti-spasmodic effect of *Viburnum prunifolium*,

made from the root rather than the bark, formed the basis of humulus lupulus compound. To this was added phenylethylmalonylurea $\frac{1}{4}$ grain (16 mg.), and the compound was dispensed in capsules.

A group of 22 cases of severe dysmenorrhea, among the employees of an industrial plant, was placed under daily observation for a period of eight months. The method of dosage was found to be very important. Treatment should be begun, where possible, the day before the expected onset of pain, at which time two capsules, of 5 grains each, of humulus lupulus compound should be given; then, at the onset of the menstrual flow, one capsule every three to four hours until all pain is relieved. The average number of capsules taken by each patient in these tests was 8 during the entire period of dysmenorrhea.

To complete the study of the series, the patients were given phenobarbital, $\frac{1}{4}$ grain (16 mg.) and amidopyrine, 2 grains (130 mg.) in tablets, to take every other month, at which time no humulus lupulus compound was taken. In this manner a comparison was made between the results obtained with humulus lupulus compound, as against the relief obtained by a simple combination of analgesics. The tabulations (see Chart I) were made after eight months—four months' treatment with humulus lupulus compound, and four months' treatment with analgesics alone.

The summary of these cases showed that relief was obtained with the use of humulus lupulus compound in 18 cases out of 22; and in 7 cases there was relief where analgesics alone were used. Several women commented on the fact that their dysmenorrhea was considerably less severe in the later months. Of most striking importance is the more rapid relief obtained with humulus lupulus compound, and the fewer doses required. In no cases was relief obtained by the analgesics and not obtained by the use of humulus lupulus compound.

Conclusion

Humulus lupulus compound (Lupex*) is a safe and effective treatment for dysmenorrhea. It provides prompt relief from pain in the majority of cases, and possibly a cure in some.

*The supply for these tests was kindly furnished by The Lupex Co., New York.

APROPOS OF FLOODS

Penalty is exacted, without remorse or opportunity for appeal, when man thrusts his works too confidently into the path of the major forces of nature.

—Science News Letter, Feb., 6, 1937.

Uncinariasis

(Report of a Recent Case)

By Curtis Henderson, M.D., Clay City, Ill.

INFESTATION with *Ankylostoma duodenale* or *Necator* or *Uncinaria americana*, otherwise known as "hookworm disease," "Egyptian chlorosis," "miner's anemia," or "tropical anemia," probably dates back to the year 1550 B.C. In records of ancient history, accounts appear of a severe anemia, which very likely was none other than hookworm disease.

Hippocrates (440 B.C.) describes a clinical picture in which the patients had an unnatural appetite (eating dirt, stones, etc.), associated with severe intestinal disturbances, and developed pallor of the skin, which was very probably hookworm disease.

About 50 B. C. it was noted that miners in the gold mines of Europe developed a peculiar color of the skin, which the people of that time thought was due to absorption of the exhalations of the gold.

Discovery of the worm itself was made in 1838, by Angelo Dubini, an Italian physician, while performing an autopsy on the body of a patient dead from pneumonia. He gave a full description of the worm, but at that time did not recognize the importance of his discovery. In 1854, Bilharz connected it with the chlorosis of Egypt; and by 1866 it was established in the minds of medical men generally that the parasite was the cause of the severe anemias seen in every tropical country.

Until 1877 there was no simple way to make a diagnosis in the living subject; but after Grassi demonstrated that the hookworm ova could be found in feces, diagnosis became easy.

A comparatively unknown malady until 1880, when St. Gotthard's tunnel was under construction the men developed a violent epidemic of anemia, endangering its completion. With the aid of the easy way of diagnosis it was proved they were suffering from hookworm infestation, and with aid from the Italian Government, a method of treatment was sought, with which to combat the malady. After trying various vermifuges, it was agreed that thymol was the most effective.

With the completion of St. Gotthard's tunnel, in 1882, the men sought work in the European mines, with revivals of the disease in Sicily, Hungary, Germany, Holland, Belgium, France, Spain, and England.

In 1808, Joseph Pitt discussed the dirt-eating, anemic Negroes of the southern United States—a problem which gravely concerned the planters because of its fatality to their slaves—which condition, at first, was supposed to be due to a deficiency in nourish-

ment. Not until 1893 was a case of uncinariasis reported, by Blickhohn, of St. Louis.

The disease was carried to America by slaves which were imported from Africa, and is caused by the *Necator americanus*, a slightly different parasite, in size and shape, from that found in Europe, but with similar characteristics. It spread until it has now involved the whole South where, in some places, as many as 90 percent of the people are infested.

In 1902, Dr. Charles Wardell Stiles described the American species and gave it the name *Necator americanus* or *Uncinaria americana*. Through his work, the United States Government was awakened to the importance of the disease and began a wide campaign of treatment and sanitation, which has reduced the percentage of infestation greatly.

The Worm Itself

The hookworms that infest man belong to the nematodes. Two species have been recognized: the *Ankylostoma duodenale*, or Old-World hookworm, and *Uncinaria americana*, or New-World hookworm. There are many other species that infest dogs, cats, cattle, sheep, seals, monkeys, etc., but none of them are known to infest man, nor are the two species common to man known to infest animals.

The general appearance of both species common to man is almost the same and can not be differentiated by the casual observer. The *Ankylostoma* measures about $\frac{1}{2}$ inch long and $\frac{1}{26}$ inch in diameter, the female being somewhat larger than the male. The color of the living worms is flesh-red or cream-color. The head bends backward, resembling a hook, and, by the uninformed, is considered to give rise to the name, hookworm; but, as a matter of fact, the term is derived from certain rib-like structures in the tail of the male worm.

Except for being smaller, the above description holds good for the *Uncinaria americana*, the principal difference being in the mouth, which is made up of a semi-rigid framework of chitinous material, capable of adapting itself to the mucosa of the intestinal tract. In *Ankylostoma*, the ventral side of the mouth is armed with two pairs of sharp, hook-shaped teeth, and at the base of the capsule of the mouth are two lancets, by which the mucosa is incised. Just back of the buccal cavity are situated glands which secrete a substance which, when injected into the blood, keeps it from clotting. The *Uncinaria* has but one tooth and four lancets, thus distinguishing it from the *Ankylostoma*.

The Life Cycle and Conveyance

Eggs laid by an adult worm are passed with the feces and deposited on the ground. When conditions are favorable, they hatch in from 24 to 48 hours. After hatching, the larvae move about and feed on the feces and, in about 5 days, become encysted. In this stage they are more resistant and can live for more than a year, under favorable conditions; however, under natural conditions, the extent of their life is about 6 weeks, during all of which time they are infective. On contaminated soil, coming in contact with the skin, the larvae immediately begin penetrating the skin (producing "ground itch"), enter a blood vessel, and make their way to the capillaries in the lungs, where they pass through into the bronchioles, then through the trachea to the throat, thence down the esophagus and stomach to the small intestine, penetrating the mucosa, where they undergo other larval changes, in which a buccal capsule or mouth-part is developed, capable of attaching itself to the mucous lining. In about six weeks after entering the body the worm begins egg-producing, and at eight weeks reaches adult size. The life of a worm may be one to seven years.

There are two modes of conveyance: by contamination of the soil and by carriers. The infestation is generally conveyed by contaminated soil which sticks to the bare feet, but the disease can be contracted by infested material coming in contact with any part of the skin in any manner.

Although not having hookworm themselves, chickens and pigs may be the means of spreading infestation by swallowing the ova and contaminating other soil, the ova passing through the alimentary canal.

The carrier, of course, is a menace to himself and also to others living in close association with him, even moderate infestation being a great danger to others, since it is estimated that one female worm may produce as many as 2,000 eggs in a day.

It is not known what proportion of the larvae that enter the skin succeed in reaching the intestines. Probably many die in the journey, and many are expectorated at the time they pass from blood stream through the walls to the air cells of the lungs, where also they frequently produce pneumonia.

Symptoms

Symptoms are, of course, in proportion to the severity of the infestation, and also to the individual's resistance. *Subjective symptoms*, in mild cases, are described by the patient as his being "puny" for a long time, with weakness and palpitation on exertion and a perverted appetite, such as eating salt, dirt, coffee grounds, hair, etc.

Objective Symptoms. One of the first obvi-

ous signs is "ground itch," where contaminated soil has made it possible for the larvae to enter the skin, with a stinging or prickling sensation, beginning a few (4 or 5) minutes after contamination. This is followed by pustulation and crusting, which entirely heals in about 10 days.

Anemia, from the mildest to the severest form, is present and, in children, their growth, both physically and mentally, is greatly retarded. As the disease progresses, weakness and edema of the feet, even to anasarca, develop.

There is dyspnea, pulsation of the jugulars, ulcers of the legs, and sometimes dilatation of the pupils. The appetite usually is enormous. Fever is not usually present, except in severe and terminal cases. The patients are pot-bellied, dry-skinned, and "lazy."

The blood shows anemia, with an increased number of eosinophils; the urine is normal except in extreme or terminal cases, when it shows albumin. The *diagnosis* is made from the clinical history, physical findings, and especially laboratory findings of the ova, confirming the diagnosis.

The treatment consists of general and individual prophylaxis and medicinal treatment, under which latter head we have four outstanding drugs: carbon tetrachloride; oil of Chenopodium; thymol; and betanaphthol, their effectiveness being in the order given.

Report of Recent Case

G. M., a white, American man, 46 years old, married, a telegrapher, with a wife and six children living and in fairly good health. His father and mother, one brother and two sisters are living and in good health; two sisters and one brother are dead.

He was born at Pinckneyville, Illinois, in 1889, and lived in that vicinity until 1929, when he moved to a place near Tampa, Florida, where he lived until 1934. In April, 1934, he came to Olney, Ill., to which place he decided to move his family. Returning to Florida for them, he entered a Federal Transient Camp in Florida, and after coming to Illinois was in a Federal Transient Camp in East St. Louis for 10 or 15 days, from which he came to Clay City. He was seen by fifteen or twenty doctors in each Federal Camp, and his case was treated as pernicious anemia or myocarditis, with very little improvement.

He had had all the diseases of childhood, with no sequelae; admitted no venereal diseases; his Wassermann and Kahn reactions were negative; he had never had any serious sickness and no operations of any kind; he had used beer and whisky to excess from the age of 13 to 36 years old; his usual weight was 165 pounds.

He complained of weakness, loss of weight, dyspnea, swelling of the limbs, heart distress,

cough, and leg ulcers. His trouble began in 1933, at which time he did some work on a fruit farm where he went barefooted, and after a few hours began complaining of stinging and itching of his toes, which he described as almost unbearable. Some three or four months later he began feeling weak and losing weight.

Physical Findings: I saw the patient for the first time on September 16, 1935. He was about 5 feet 6 inches tall; weighed 85 pounds; was greatly emaciated, anemic, and edematous, almost to the point of anasarca; and had a very bad cough. His heart showed myocarditis, with some heart enlargement. There were moist râles in his lungs. His liver, spleen, and kidneys were apparently normal. His appetite was large and perverted, craving for kerosene, Vick's salve, dirt, etc.

His blood showed hemoglobin about 35 percent; and eosinophilia was present. His urine was normal. The State Laboratory and the

Olney Laboratory reported hookworm ova in his feces.

Treatment: Owing to the history of his having been an excessive drinker, oil of *Chenopodium* was chosen as the best of the four drugs to use in this case.

After a light supper, a purgative dose of magnesium sulphate was given, followed the next morning, at 7, 8, and 9 o'clock, with an elastic capsule containing 5 minims of the oil. This was repeated every week for 4 weeks. Iron, arsenic, liver, and cod-liver oil were given for the anemic condition.

Three weeks after the last dose of *Chenopodium*, his feces were tested by the State Laboratory at Springfield, with a negative report. Six weeks after the last dose another test was reported negative.

His hemoglobin is now 70 percent, and there seems to be a slight gain in weight. He still has some cough and some râles in the lungs. The myocardial condition has improved, and the patient is gaining strength and is not so depressed mentally as he was.

Morphine Addiction

By G. A. Weirick, M.D., Elgin, Ill.

IN the successful treatment of morphine addiction, it must not be considered as a habit or something which the patient can quit without the help of one who has had experience and well understands the helpless position the user of drugs is in. It is a functional disease, more clearly understood than many other functional diseases, and permanently amenable to treatment only when so recognized.

All victims of the morphine disease who were morally normal before their addiction are eager to be cured. Morphine blunts, but does not permanently affect the moral character of the user.

The disease has no specific pathology, nor does it cause any permanent functional disease. It is not cured after the last dose of the drug, as this is merely the beginning of becoming well and independent of all artificial support. When the reconstruction of the nervous system is complete, and only then, there is no physical, mental, or moral sequence.

Most users of morphine refuse radical treatment, and one cannot blame them, as they have not been told by their physicians that the withdrawal of the drug may be accomplished without serious suffering in nearly every case, if the drug is withdrawn gradually, and the necessary agents used. Regarding the fear of undergoing extreme suffering for several days, they are like or-

dinary neurasthenics, or even most healthy individuals. The fear is greater because they know, from past experience, the suffering caused by the immediate or too-rapid withdrawal of the drug; hence no blame should be laid up against them, and above all, they should not be fooled, but treated honestly in every way, and those who are eager to free themselves of the drug will cooperate with and respect the physician who is honest with them, and will also make much better progress.

The patient must make a supreme effort and decide to give up the drug. This can now be done with very little discomfort. He must select some sanitarium managed by capable men, and place himself implicitly under their care to accomplish this purpose. He must go prepared to stay from four to eight weeks, or longer, if necessary to secure entire freedom from slavery to the drug. This is not a difficult process, if sufficient time and proper means are employed.

There are a great many so-called "cures" in this country. Many of them are dangerous places, because the patient's physical and mental condition is greatly impaired in the process of removing the drug. Claims of short and painless cures; a discovery of some new treatment unknown to others; promises of perfect cure and relief, or a claim to withdraw the drug without the patient's knowing it, and with permanent freedom from it, are

to be regarded with suspicion. There are no short-cuts nor specific remedies, nor cures of any kind that are applicable to every person. Every drug user requires special treatment and the use of measures adapted to his peculiar condition. There are no wholesale treatments that can be used in all cases. The very best scientific treatment possible is called for. Even when the drug is withdrawn, the patient needs the aid of the physician to continue the building-up processes to prevent a relapse.

The number of drug addicts in this country is undoubtedly very large, and they are usually very eager to recover, but are more or less fearful concerning the consequences which may follow in the effort to accomplish this. They need the best possible counsel and assistance, and protection from pretenders who would seek profit by their misfortune.

I have been in this work for thirty years and fully realize how impossible it is to treat all such persons alike by any specific drugs or cures. I also realize that the withdrawal of the drug and the restoration of the person is a matter of great certainty, and in most cases with very little suffering. There are no miraculous means or measures. It is simply the application of the best scientific measures and means which experience points out, in the best possible surroundings, and such application is being made continuously, with most gratifying results.

The problem of reduction of doses is not mathematical, it is therapeutic. The rapidity of the reduction process depends upon what we think the patient *will* stand; not upon what we think he *ought* to stand. It is at this point that the mathematical problem of reduction should disappear and the real therapeutic problem should become clearly manifest. To estimate what an addict is willing to do is a difficult matter, but that is the problem to solve. It is the experience that we have gained from daily association with these people that simplifies the problem. When the patient is going along honestly, he presents well-defined symptoms.

I believe intelligent reduction, administered without restraints, will secure the highest percentage of permanent results; and I believe that it is the only method that thousands of

addicts, especially the more intelligent among them, will voluntarily attempt. No system of reduction is perfect that needs restraints for its successful application, if we except those patients who are not in earnest.

The prevalent opinion, that all opium addicts are almost wholly lacking in will power, is not at all in harmony with the facts, but is due to the bungling efforts that have been made to cure these unfortunate people. A nervous system that has been abused by long use of morphine needs and must have time for its healing. A sudden withdrawal of morphine only damages further an already shattered nervous system, and therefore must delay the final restoration of health.

The drug taker is aged and suffers from progressive degeneration—conditions not confined to one organ or set of functional activities; conditions that depend on a great variety of means and measures which can be utilized to bring about a cure with as absolute certainty as the treatment of any other disease.

To make the reduction process effective, one should have an extensive knowledge of the addict and his ways. One should be thoroughly conversant with the mental, moral and physical changes produced by each narcotic drug and by alcohol. I can conceive of no success worthy of the name that is not built upon this foundation. One cannot succeed with this method who does not know how to keep his patients comfortable throughout the whole period of treatment. This cannot be done by one who lacks the technical knowledge and experience.

The addicts that I treat are chiefly of the professional and cultured classes, and surely their health and their lives are an asset of no mean value to society. No case can be declared hopeless in advance.

Our lawmakers have tried to put the morphine addict in the criminal class, but no law-making body can alter scientific facts. The morphine addict is an invalid and should be treated as such.

If a humane method is employed the results are always satisfactory, and it is a pleasure to treat these patients. Moreover, they will do everything they can to help and will be grateful for a cure.

162 South State St.

BIRTH CONTROL AND WAR

There can be no peace as long as populations multiply beyond the ability of their respective nations to maintain a high and rising level of material comfort. The only solution is to bring the reproductive interests and activities of modern men under the same control of reason, foresight and will, on which we pride ourselves in every other great department of life.—DR. HENRY P. FAIRCHILD.

PHYSICAL AND OFFICE THERAPY AND RADIOLOGY



Incorporating
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FOR OFFICE THERAPY

RUSSELL A. WINTERS, M.D.

The Forgotten Foot: A Physical Therapy Opportunity

By Joseph E. G. Waddington, M.D., Detroit, Mich.

It is, perhaps, hardly to be wondered at that the busy practitioner, and the highly trained consultant, should both passively ignore the foot as not being a vital organ. Certain parts of the body, such as the heart, lungs, and kidneys, are essential to life and, therefore, they preeminently attract professional attention. No matter how localized or generalized the symptoms of which a patient may complain, it is customary and essential to correct diagnosis and therapeutics that a thorough physical examination should be made. The foot, however, although vital to normal locomotion, is seldom considered as vital to health; both the patient and the physician apparently are in agreement that the feet and their ailments are beneath the dignified and practical attention of the graduate in medicine.

The orthopedist, of course, constitutes the one notable exception to this medical neglect; but even his attention is more popularly invoked for what are considered the major osteologic deformities and disabilities. The specialist's fee is beyond the economic reach of the average foot patient. The chiropodist is thought of first and often; the physician but infrequently, by the sufferer from corns, callus, bunions, and those diversified and crippling conditions vaguely referred to as "weak feet." Even if the foot patient, incidentally or even purposefully, should refer

to some pedal distress, it is not unusual for the physician to ignore any examination of the feet and to advise that a chiropodist be consulted.

In days not so long past the general practitioner experienced no particular difficulty in keeping busy; today modern preventive medicine has eradicated many formerly prolific sources of disease. There is more and more state and national encroachment upon private practice; and there is a tremendously increasing abstraction and alienation of otherwise prospective patients by legalized and non-legalized therapeutic sources, not approved by the medical profession. All this means that the general practitioner is now kept busy in anxiously endeavoring to acquire and retain enough financially remunerative patients to enable him to continue in the practice of medicine and still remain a self-supporting and respected citizen in his community.

Painful, debilitated feet curtail healthful participation in sports and also restrict normal exercise of the feet and legs. The feet constitute a flexibly adjustable base upon which is borne the entire weight of the body when standing or walking.

Morton¹ attributes the primary cause of

1.—Morton, Dudley J.: "The Human Foot: Its Evolution, Physiology, and Functional Disorders." Columbia Univ. Press, N. Y., 1935.

functional derangement of the foot to one or more of three comparatively simple and definitely localized conditions: a relative difference in length between the first and the second metatarsal bones; hypermobility of the first metatarsal segment; and a backward displacement of the sesamoid bones of the first metatarsal.

Subjective foot symptoms often lag in intensity behind the objective, and the x-rays are frequently, if not invariably, necessary to a correct diagnosis and appreciation of the corrective measures involved. According to Morton: "Hypertrophy of the second metatarsal bone is a positive *keynote* sign of functional disturbance, and invariably anticipates subjective symptoms."

Serious structural foot defects more commonly develop as the final summation of a long, continuous, and gradual traumatism, initiated by the strain of faulty weight distribution and the stresses of improper footwear. Shoes were primarily designed for protection; they have now, apparently and largely, degenerated into decorative—as well as non-decorative—crippling devices. The exigencies of modern civilization; the change from rural surroundings, involving pedal contact with hard, resistive stone and concrete floors and walks, and the demands of a highly specialized and mechanized industrialization, which compels a large proportion of the working population to exchange a sedentary for a standing position, have stimulated the market for shoes. Unfortunately, very few shoe manufacturers appear to possess the anatomic, physiologic, and practical knowledge essential to a correctly designed shoe. Until more physicians become qualified to render efficient foot service at a reasonable fee, it will continue to be difficult to persuade the average shoe manufacturer to appreciate the necessity for improved, healthful footwear.

The student who decided to confine his medical attention to the rectum, because everyone, without exception, possessed one, might even more logically have chosen to be a foot specialist, because the field is twice as large, and the feet are almost universally in need, at some time or other, of more or less simple prophylactic or curative professional attention. It is unsound business for the general practitioner to continue to act as an employment agency in the interests of those whom he could so easily and satisfactorily emulate.

The physician should recognize the important, but too often overlooked fact that incorrect distribution of body weight upon the organs of locomotion leads to incorrect posture, and quite generally to more or less disturbance of other parts of the body.

Although there are but few physicians

qualified to serve as expert chiropodists, there is no legal or technical reason why they should thus remain inferior. Not all physicians could qualify as orthopedists, and yet no general practitioner invariably refers all his patients with complaints of strains or stresses in various joints of the body to the orthopedic specialist. It should be comparatively easy for the physician to expend a little time and study in acquiring a better anatomic, physiologic, and clinical knowledge of the diverse factors which may enter into every problem of weak and defective feet.

No physical examination can be considered complete without a thorough foot and postural investigation, and every case history should include definite information as to any objective or subjective symptoms possibly referable to the feet. This naturally implies careful inspection of the footwear. The physician need not be an expert shoe fitter, any more than he need be an expert pharmacist. He should, however, be able to alleviate much of the pain and disability of his patients and advise as to the special requirements of the indicated footwear. The major portion of foot ills may be satisfactorily disposed of by simple treatment, in the office and the home, and by correctly adapted shoes.

The chiropodists have elevated professional care of the feet to the dignity of a specialty entitled "podiatry," and thereby have transformed themselves into "podiatrists." The medical profession has only itself to blame for permitting such an important branch of medicine to be diverted from its neglectful hands. There is a popular and lucrative demand for the relief of foot ills, and the general practitioner with physical therapy training can easily qualify himself to render efficient, inexpensive podiatric service, and thus considerably enlarge his professional scope and grateful clientele.

Treatment

Foot ills rarely require medicine; only infrequently do they demand particularly involved surgical procedures; but they do, insistently and invariably, call for some form or forms of physical therapy.

A weak and tired foot, like any other similarly affected part of the body, may be prophylactically and alleviatingly cared for, and such care will obviate many otherwise inevitable and increasingly serious disorders. For acutely inflamed and spastic conditions of the muscles, a hot pack, applied for three minutes and followed by a cold pack for thirty to sixty seconds, and thus alternated a half-dozen times, is simple but effective treatment.

Contrast baths may be substituted as the condition becomes less severe. The feet are immersed in hot water for one and a half-minutes and then in cold for a half-minute;

and this is repeated for from ten to fifteen minutes. These localized hydrotherapeutic measures may be given once or twice a day, as indicated, and safely prescribed for home treatment.

In the office, short-wave, high-frequency treatments may be used for sedative effect, by placing both feet in contact with a large, flat condenser electrode and encircling both legs with a cuff. Diathermy may be substituted, but the electrodes will require more specific localization than is necessitated when applying short-wave, high-frequency energy.

Galvanization, with the foot immersed in a Schnee or water-bath electrode, followed by a superimposed or other sinusoidal or wave current, is excellent treatment, not only for weak and tired feet, but also for weakened musculature incident to sprains, fractures, and paralytic disability.

Gently instituted manipulation of the foot as a whole on the ankle joint, followed by localized movement of the metatarsal arch and of each separate toe, is almost invariably indicated as an adjuvant to any other treatment applied.

The McDowell oscillator is an extremely compact and effective appliance, specially adapted for the application of oscillation or vibration to the foot. The patient may either sit or stand with one or both feet in contact with the apparatus as indicated. The inten-

sity of oscillation is automatically controllable by the position of the feet and their proximity to the center of the foot plate. Oscillation thus applied stimulates the circulation, passively exercises the entire foot, and thus conduces to relaxation of spastic muscles and stiffened, painful joints. It is indicated as an adjuvant after thermal or galvanic applications, and prior to any manipulative procedure, but is naturally contraindicated in any acute inflammatory or infectious condition.

Although a large proportion of foot troubles are essentially local, it is wise to bear in mind the possibility that so distant and dependent a part of the body as the feet may be secondarily implicated as a result of some systemic derangement, circulatory, cardiac, diabetic, infectious, or otherwise.

Finally, it is important to recall that the practical concept of shoes as an orthopedic and healthful adjunct is a relatively new development, only, as yet, imperfectly and reluctantly accepted by the physician and, consequently, by the shoe manufacturer. Until the medical profession becomes more generally foot-conscious, it will remain difficult for a few chiropodists and still fewer orthopedic-minded shoe manufacturers to stem the tide of increasing foot disability and popular but disabling footwear.

110 Atkinson Avenue.

The Injection Treatment of Hernia*

Part III

By Albert W. Dowson, M.D., Chicago, Ill.

Indirect Inguinal Hernia

Treatment of the Internal Inguinal Ring

THE instruments used in the correction of hernia by the injection method must be surgically clean. Sterilize them by boiling, as is done in preparation for any other surgical operation.

A sterile syringe, preferably of glass, of 5 cc. capacity, with a rustless steel, 22-gage, 2-inch needle attached, is filled with the necessary amount of proliferating solution for the injection of the internal inguinal ring. After the syringe has been filled, any solution remaining on the outside of the needle will prevent its passing smoothly through the skin. This may be corrected by briskly rubbing the needle with a sponge moistened with alcohol. Cover the syringe and needle with sterile gauze and lay aside the instrument until ready to use it.

Having decided that the hernia is suitable for the injection treatment, and the patient having been fitted with a truss which he has been wearing for a week or longer, he is

disrobed and placed on his back, with the thighs and knees flexed, upon a table, the foot of which has been elevated six or more inches. This position relaxes the abdominal muscles and causes the viscera to gravitate toward the diaphragm, away from the abdominal orifices.

Inspect the truss for mechanical defects and faulty contact; the appliance having been found to be satisfactory, is then removed by the operator.

Examine the skin, especially the area that has been in contact with the truss pad, for irritations and erosions due to pad pressure. Insertion of the needle is not made in the presence of lesions or infections of the skin.

Topographical location is made of the os pubis, the anterior superior iliac spine, Poupart's ligament, and the internal and external inguinal ring (see Fig. 1). Take note of and record any scars on the abdomen and abnormalities of the external genitalia.

The pubic hair is clipped, in preference to shaving, because shaving frequently abrades the skin, causing irritation and discomfort to

*This is the third part of a four-part serial article.

the patient when the hair grows out under the truss pad. The skin of the abdomen is cleansed with alcohol and tincture of iodine is applied to the area where the needle is to be inserted.

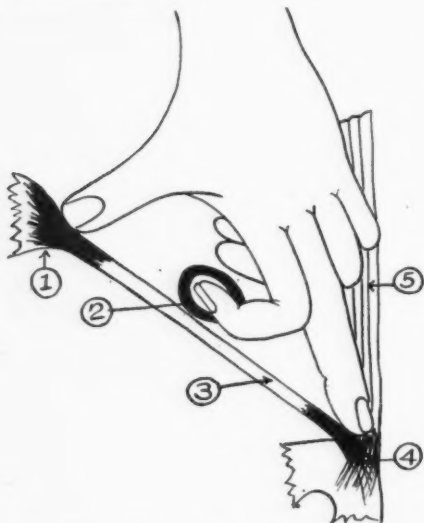


Fig. 1:—Practical method of locating the internal inguinal ring. (1) Anterior superior spine of the ilium; (2) internal ring; (3) Poupart's ligament; (4) os pubis; (5) rectus abdominis muscle. Place the tip of the thumb over the anterior superior spine of the ilium; the tip of the middle finger over the os pubis; the tip of the flexed index finger will be over the internal inguinal ring.

The operator takes his position at the side of the table, facing and to the left of the patient. The index finger of the left hand, by invaginating the scrotum, is inserted through the external inguinal ring into the inguinal canal (see Fig. 2). Palpation is made of the os pubis, Poupart's ligament, the spermatic cord, the floor, width and length of the canal, Hesselbach's triangle, and the femoral vessels.

With the position and relation of these structures in mind, advance the index finger upward in the canal into the internal inguinal ring, so that the ring rests upon the palmar surface at the distal joint of the finger. Palpation of the internal ring is made for size, shape, thickness, adhesions, and its position in relation to Poupart's ligament and the location and exit from the abdomen of the spermatic cord. Decide the number of injections which will be required about the ring to close it. Be positive the hernia has been reduced into the abdominal cavity.

With the aid of the thumb of the same hand, lift up the tissues. This manipulation draws them away from the cord and usually places the cord posterior or latero-posterior to the finger, thereby avoiding puncture of

it with the needle during its insertion through the tissues.

The syringe, which has been prepared previously, is taken in the right hand. Hold it as you would a pen, at an angle of forty-five degrees to the abdominal wall. Insert the needle downward and outward, directed at the tip of the index finger, through the skin, fat, and the fascia of the external oblique muscle. Release the hold with the thumb and locate the point of the needle with the index finger. The needle is guided to the medial side and about one fourth inch inward from the margin of the ring. Here it is imbedded in the tissues. Care must be taken not to penetrate the peritoneal cavity.

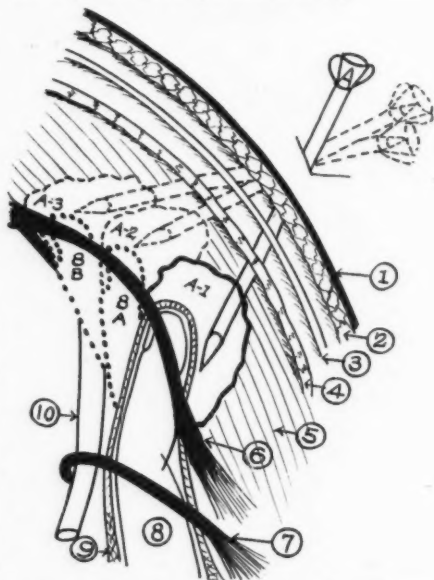


Fig. 2:—Treatment of the internal inguinal ring. (1) Skin; (2) fat; (3) external abdominal oblique muscle; (4) internal oblique muscle; (5) transversalis muscle; (6) internal inguinal ring; (7) external inguinal ring; (8) index finger of the operator; (9) invaginated scrotum; (10) spermatic cord. (A) Needle inserted into the tissues at the medial side of the internal inguinal ring; (A-1, A-2, A-3) injections of the proliferant solution into the tissues about the internal inguinal ring; (8-A, 8-B) the index finger advanced outward in the ring to the sites selected for the injections of solutions.

Withdraw the piston of the syringe a short distance, to ascertain that no blood vessel has been penetrated by the needle. If blood does not flow into the syringe, slowly inject 1 cc. of the proliferant. (The amount of solution injected at each site will depend upon the strength of the solution that is being used by the operator. If the dose of the solution is 2 cc., and four injections will be required about the ring, the amount of solution injected at each point should be 0.5 cc.)

After the injection at the medial side of

the ring, the needle is withdrawn from the tissues, but not far enough to remove it above the fascia of the external oblique muscle. The index finger, at the same depth in the ring, is advanced along the ring, outward, to the site selected for the next injection. The needle is again inserted into the muscle tissues about the ring and the solution is injected as before. This procedure is repeated until the desired number of injections about the ring have been performed to close the hernial orifice.

The last injection of the proliferating solution having been made about the ring, the needle is removed completely and the index finger of the operator is withdrawn from its position in the ring and canal. Light but firm pressure of the hand, with a sterile gauze pad, is made upon the skin directly over the internal ring for two or three minutes. Massage lightly, to distribute the injected fluid evenly throughout the tissues. A drop of tincture of iodine is applied to the puncture wound made by the needle. Cover the skin with a sterile pad consisting of three or four layers of gauze. The patient lowers the thighs and legs and rests, in the recumbent position, for from several minutes to half an hour upon the table, after which the operator reapplies the truss and assists the patient from the table. The patient may return to his usual vocation.

The internal "ring" is not a ring at all, but merely a funnel-shaped expansion of the transversalis fascia; which the cord carries down with it as it escapes from the abdomen. This expansion may be weakened, but it is never an opening, save when made so artificially.

In those cases in which it is impossible for the operator to locate or palpate the internal inguinal ring by invaginating the scrotum, this structure may be located midway between the anterior superior spine of the ilium and the symphysis pubis, and about half an inch above Poupart's ligament (see Fig. 1). Deep pressure upon the skin at this point, by the examining finger, may reveal a depression or aperture in the musculature.

As the needle passes through the skin, fat, and fascia of the external oblique muscle into the transversalis muscle, it meets with various degrees of resistance, which may be distinctly felt by the operator. It is his interpretation of these resistances by the tissues that will enable him to determine the depth of the needle in the abdominal wall.

The proliferating solution is injected into the muscle tissue about the aperture, as previously described, except that the injections are placed by "needle touch" instead of relying solely upon the guiding finger.

The second treatment of the internal inguinal ring is usually made after the acute reaction of the tissues to the solution of the first injection has subsided, about four or five days later. At this treatment the index finger is not permitted to enter the internal inguinal ring, but is inserted into the inguinal canal up to the internal ring.

After digital examination of the internal ring and the surrounding tissues, the needle, with the syringe attached, is inserted as previously described. The point is located and guided by the index finger to the site chosen for the injection, as was done at the first treatment. The needle will meet with greater tissue resistance than it encountered at the previous insertion, due to the reaction of the tissues to the injected solution. The treatments are continued until the internal inguinal ring has been closed—usually two or more, depending upon the size of the hernial orifice.

When the hernial content has been returned to the normal position and the internal inguinal ring has been closed so as to retain the abdominal viscera, the hernia has been corrected. The closure of the inguinal canal and the external inguinal ring, along with the reinforcing of the tissues of Hesselbach's triangle, are reinforcement for the abdominal wall, much the same as the overlapping and suturing of the fascia of the external abdominal oblique muscle, which is so frequently performed in the surgical correction of hernia.

175 W. Jackson St.

(To be concluded)

GRATITUDE

One mustn't expect gratitude. It's a thing that no one has a right to. We do good because it gives us pleasure. It's the purest form of happiness there is. To expect thanks for it is really asking too much. If we get it, it's like a bonus on shares on which we've already received a dividend; it's grand, but we mustn't look upon it as our due.—W. S. MAUGHAM, in "The Back of Beyond."

*Only where love and need are one,
And the work is play for mortal stakes,
Is the deed ever really done
For Heaven and the future's sakes.*

ROBERT FROST, in "A Further Range."

NOTES AND ABSTRACTS

Counterirritation by Ultraviolet Rays*

THE ultraviolet rays that cause erythema of the skin can be successfully employed for counterirritation. Wave-lengths shorter than 3000 Angstrom units, applied to the normal white skin, cause erythema after a latent period of from 4 to 6 hours. The dose and technic of irradiation control the degree of skin reaction that results. This can be varied so as to cause a mild erythema or a definite or severe blistering of the skin. Ultraviolet irradiation is, therefore, excellent for counterirritation, as the rays can be directly applied to any area and the degree of reaction can be accurately defined and controlled. With the chemical and other counterirritants, this is not always possible in practice; the strength of such drugs as mustard is difficult to regulate and often their application has to be repeated until the desired skin reaction is obtained.

Skin erythema appears about 4 hours after ultraviolet irradiation; a maximum reaction results about 48 hours later and this erythema may persist for 3 or even up to 12 days, with intensive doses. With still increased intensity of radiation, edema and blistering are produced; this effect may be obtained by increasing the strength of the ultraviolet rays emitted by the source of light, by diminishing the distance between the skin and the source of rays, or by increasing the length of exposure. The dose of rays can be accurately determined and expressed in terms of skin erythema doses; usually from 6 to 10 skin erythema doses are applied for counterirritation therapy. Following the erythema, edema, and blistering of the skin, there is drying and desquamation. Pigmentation finally results. The dilatation of the skin capillaries in an area of irradiated skin persists for many months; this phenomenon can be clearly demonstrated, for if 1 cc. of histamine phosphate solution, containing 0.003 Gm. of histamine base, is injected subcutaneously, an intense erythematous blush appears 10 to 15 minutes later in the irradiated skin; the surrounding area does not show any visible change.

The erythema and blistering reaction of the irradiated skin is painful and uncomfortable. This is a very serious complication, for the symptoms are often so severe and unpleasant that the patient becomes greatly distressed and has to go to bed. Fortunately this painful reaction can be checked and at times successfully avoided. Directly after irradiation, adhesive Elastoplast strapping is ap-

plied to the irradiated skin and the surrounding area. This greatly diminishes the painful symptoms, but in no way alters the reaction. The strapping is kept on and left undisturbed for 14 days; it is then removed and the irradiated skin is exposed, revealing a reddish-brown, moist area. Pigmentation varying in color from a pale to a dark brown will finally develop. The relief of the painful symptoms obtained by the application of strapping is indeed most remarkable, for by this means it is possible to apply 10 to 12 times the normal skin erythema dose of ultraviolet rays to an area of normal white skin without unduly disturbing the patient. Intensive erythema, edema, and exudation must develop in the protected skin area. It is necessary to explain emphatically to the patient that the strapping *must not be disturbed for 14 days*. If this skin area is still painful, infrared rays can be applied, two or three times a week, to this region, the strapping being left undisturbed.

Method of Application

The area of skin selected for ultraviolet irradiation is mapped out carefully with a dermatograph pencil. The time and distance factors of dosage are also indicated by writing on the skin, so that accurate information will be directly available at the time of treatment. The surrounding skin area is protected from the rays of the lamp by a covering of pieces of crepe paper attached by strips of adhesive plaster or strapping. Towels or other simple means of protection may be employed. The irradiated area is accurately exposed according to the described formula. Usually a skin area measuring roughly 12 by 10 inches is exposed. A quartz, air-cooled, mercury-vapor lamp, operated by a current of 2.5 amperes and 140 volts between the electrodes, is switched on. At a distance of 12 inches between the quartz burner and the skin area, an exposure for 20 minutes, equivalent to ten normal erythema skin doses, is applied. This irradiated skin area and the surrounding skin margin, extending for from 1 to 2 inches, is immediately covered by overlapping strips of adhesive plaster 2 to 2½ inches in width. The dermatograph pencil marks are removed. The patient is instructed to leave this plaster undisturbed for 14 days.

Indications

The types of cases selected for treatment by this technic of intensive ultraviolet irradiation were those in which symptoms of acute pain were present (brachial and sciatic neuritis, lumbago, fibrositis, etc.); those in whom there was swelling of joints due to

*The Lancet, June 20, 1936.

effusion of fluid; those with symptoms of asthma, with dyspnea, and a definite history of frequent attacks of troublesome respiration.

Those patients, who complain of pain in the neck, radiating to the shoulder and arm, were treated by the application of the rays to an area of skin over the cervical area, passing to the shoulder and arm. At a distance of 12 inches from the source of light the skin was irradiated for 20 minutes.

Lumbar pain was similarly treated, but the painful and tender skin area of the back indicated by the patient was irradiated. Usually the size of the area was 10 by 12 inches. In the successful cases relief of symptoms was reported after the first treatment.

ALBERT EIDINOW, M.B.

London, Eng.

The products we advertise are worthy of your attention. Look them over.

Electrosurgery in Caruncles of the Female Urethra

THE surgical treatment of caruncles consists in the removal of the growth by simple fulguration, surgical excision, or electrosurgical resection and electrocoagulation.

The advantages of electrosurgery in the treatment of caruncles are:

- 1.—The ease with which the procedure is carried out.
- 2.—Painlessness of electrosurgery.
- 3.—Control of bleeding.
- 4.—Prompt relief of symptoms.
- 5.—Absence of local reaction.
- 6.—Restoration of parts to their normal function.
- 7.—Assurance of a permanent cure.
- 8.—Convenience of obtaining tumor tissue for examination.
- 9.—Elimination of danger of malignant transformation of the caruncle.
- 10.—No hospitalization is required, the patient resuming her normal life without further interruption. — ROBERT GUTIERREZ, M.D., in *Urol. and Cutan. Rev.*, April, 1936.

Short-Wave Treatment in Cellulitis

IN cellulitis of the sinus regions and the eyes, accompanying sinus infections, the pain is promptly and markedly relieved by ultra-short-wave treatments; but this method will not, of course, release pus nor relieve pain of mechanical (pressure) origin, nor cure the infection itself.—BURTON HASELTINE, M.D., F.A.C.S., Chicago, Ill.

Physical Treatment of Industrial Injuries*

PHYSICAL therapy has played a most valuable part in lessening the period of absence and enabling workmen to resume their useful working life with a minimum waste of time.

Infrared irradiation has had an immediate soothing effect in cases of lumbar muscle strain, when applied immediately after the accident. The injuries treated by infrared rays include muscular strains of the back, ligamentous strain and torn fasciculi of the external lateral ligaments, soft tissue wounds, such as deep-seated contusions and hematomas, sprained ankle, sprained wrist, tenosynovitis, nail infections, etc. Irradiation is given for from 20 to 30 minutes, followed by complete rest for two or three days, depending upon the extent and severity of the injury.

Severed tendons and contused or crushed tendons are treated by surgery, splinting, and immobilization for at least 14 days; then by three or four applications of massage and faradic current to restore full functional activity. The physical therapy is not applied until after removal of the splint, and until a certain amount of active movements have been carried out.

Fractures and joint injuries of the hand are treated according to the same general principles. Massage will not free the stiffness of small joints, but has its place in restoring muscle tone.

JOHN WILLIAMSON, M.B., B.Ch.

Bournville, England.

Look for FACTS AND COMMENTS among the advertising pages at the back.

Ultraviolet Irradiation As a Prophylactic For Cracked Nipples

I HAVE treated cracked and painful nipples, that occur in the last month of pregnancy, with ultraviolet rays. From six to eight treatments, depending on whether the patient is of the blonde or brunette type, have been employed for the past two years.

Treatment is given three times per week. Only the nipple and areola are exposed. Since this treatment was started, in not one instance has there been even the slightest trouble, some 50 patients having been treated.—E. K. MACLELLAN, M.D., in *J. Obst. & Gynec. of Brit. Empire*, April, 1936.

**Brit. J. Phys. Med.*, Sept., 1936.

A LIVING FOR THE DOCTOR

(The Business of Medicine and the Art of Living)

Culture as Advertising

(Art in the Office)

THE ethics of the medical profession denies a physician or surgeon the privilege of advertising, which is open to many professions and to most vocations in the business world. The layman usually looks upon any doctor who advertises as a racketeer, patronized only by suckers. Yet every successful doctor is advertising, every hour of his life.

It has been my privilege to know intimately a great many doctors. My first acquaintance was with dear old Dr. Boyle, our family physician, who some sixty years ago vaccinated me and took care of me when I had measles and other childish complaints. He was loved, respected, and venerated by all who knew him, and I believe fully deserved the high esteem in which he was held. His devotion to the best interest of everyone brought the community to him for counsel in matters quite foreign to his profession. No night was too stormy, no road too long for him to answer a call when he was needed. As a country school boy I borrowed many a book from his library, and regarded his well-furnished home as the finest place in the world.

I think that he, more than any one else, inspired many of the youngsters of the neighborhood with a love and desire for the finer things of life. Since his day I have known many doctors, but he stands out, among the many physicians I have known, as the most truly cultured man among my boyhood acquaintances.

Since that time the practice of medicine has changed greatly. This is an age of specialists. I have no doubt that any one of my friends among doctors today knows far more about the theory and practice of medicine and surgery than did Dr. Boyle; but I doubt if any of them are of much greater service to the community in which they practice than was he in his community.

The problem confronting every young doctor today is: "How shall I secure the practice for which my training qualifies me?" We all know many well-qualified physicians who have a hard time to pay office rent and support a family. Is not the secret of success in

medical practice, after all, one of successful advertising, in a perfectly ethical manner?

No doctor can afford to hide his light under a bushel. You may be able to prepare and read before your Medical Society an able paper, which is respected and admired by your brother practitioners, and yet have very few patients.

What is the best means you can employ to gain the respect and confidence to which your professional ability and training entitle you? You are *advertising*, every hour of your life, just the sort of man you are. No fooling about this! Everyone knows that you have had four years of college life, before you began your professional training. It is presumed you are, not only a man, but a *cultured* man, entitled to the respect which true culture brings. Are you demonstrating that you possess that culture which is properly attributed to a college-bred man?

There are many ways in which you can show that you possess a culture broader than that of the average non-collegian; but since this is an age of specialists I want to discuss my specialty and point out the importance, to you and to those who come to your office, of the kind of *pictures* you have on the walls of that office.

For nearly forty years I have known nearly every artist producing in our country, and have been honestly trying to assist my friends and clients to provide themselves with worthwhile works of art. This experience, unless I am unusually stupid, entitles me to enter upon this discussion with the hope that it may be of service to you.

We all employ the written or spoken word to express ourselves, and it is a great art and evidence of a cultivated mind to employ words which express clearly our thoughts and concepts. But there are those who are gifted with emotional impulses which words cannot express. Both music and art are truly the language of the emotions.

The finest pleasures we enjoy are most of them emotional. Any scheme of education which neglects the cultivation of our finer

emotions is sadly deficient. We all, subconsciously, have many pictures in our minds. I sometimes wonder what kind of pictures must crowd the walls of memory of a doctor, who sees so much of human pain, suffering, and misery. Possibly the physician, more than anyone else, needs the inspiration coming from fine works of art.

The picture every thinking man likes best is the picture he paints himself—not with his own hand, for it requires as much skill to produce a worth-while painting or etching as it does to remove a tumor from the brain—but a gifted artist has put on canvas that very sunset which thrilled you when you saw the sun go to bed in a blaze of glory, and the memory of which made your vacation trip worth what it cost. When you see this painting, it is *yours*, because you are a partner of the artist who painted it, at least so far as his concept goes.

The kind of pictures you really love is the kind you would be painting yourself, if you were an artist and had the skill. I wonder if the pictures you have on the walls of your office are the kind you would like to have your visitors think you would paint if you were an artist. Do they really express your

finest ideals or give a true index to your friends of what you want them to think of you, not only as a doctor, but as a cultured man?

Of course, not every doctor can afford a famous masterpiece. But today, after six or seven years of depression, during which our artists have sold few pictures, it takes so little to secure really worthwhile works of art, that you can hardly afford to be without pictures, in your office and in your home, which satisfy your own taste and indicate to others that you possess that fondness for the finer things that is an unerring sign of culture.

You have among your friends someone whose artistic taste you respect. Pay him the compliment of discussing with him the kind of pictures you should have in your office. Get the best you can afford. Learn to enjoy them, and share the pleasure they give with others. For, after all, the successful physician is more than a surgeon or an ethical practitioner. He is (or should be) a *teacher*, teaching people how to live wisely and enjoy the finer things of life.

J. W. YOUNG

Chicago, Ill.

NOTES AND ABSTRACTS

Capable Workers Past Forty

WITH the passing of the years we are inevitably reminded of the approach of old age, that dreaded period of physical and mental incapacity for work. It stands to reason that, with the decline of the physical powers, the ability to perform manual labor is largely curtailed. The old man cannot perform the physical tasks which in young manhood and middle age he found no difficulty in accomplishing. He tires quickly, or the weakened muscles are utterly unable to do that which they formerly could do.

In many men there is also noted a slowing up of the mental capacity for work with the onset of middle age or in the period of post mid-age. That this is not universally true, however, has been demonstrated very recently in the life of that eminent Chicago literateur, Opie Reed, who, at 84, has just finished and published a book, and who will immediately begin the preparation of another to add to the fifty or more volumes he has contributed to the world's library of useful information. These wonderful Titans of capable old age,

however, necessarily comprise but a very small group of elderly mankind. Most of their associates of advanced years have largely stopped their useful productiveness for various reasons, probably for the most part endocrine in nature.

It is this general arrest of mental activity which has resulted in the cruel and unjust relegation of many men of forty and past to an enforced inactivity among the ranks of the unemployed, irrespective of the amount and quality of the mental and physical work they are capable of producing. Fortunately, this restriction of opportunity is confined mainly to the field of employment, large though this is, and cannot be applied to personal initiative in the fields of literary, historical and scientific research. Much valuable work has been done by these independent workers, following the so-called "hobbies" in which they have become interested and which, in many instances, have proved to be true life-savers, both physically and mentally. It was the magnificent accomplishment of these workers in the advanced years of life which prompted

Corwin, the medical poet of Chicago, to admonish:

"Standardize your wheels and planes;
Leave untouched the realm of brains."

The problem of the man or woman of fifty is an acute one, and is rapidly growing more urgent. A few statistics will demonstrate that this is so. According to an insurance statistician, the birthrate in the United States is just about half what it was fifty years ago, while at the same time the span of life expectancy has been very materially lengthened. Consequently, it is estimated that, by 1980, about 36 percent of the nation's population will be over fifty years of age.

This statement compels to some serious thinking on the part of us all. To what extent is this middle-age problem responsible for the continuance of millions in unemployment, notwithstanding an appreciable acceleration in industrial activity? A comprehensive survey of the subject will eventually answer this question. It has become steadily more difficult for a worker past forty years of age to re-acquire a job during the seven years of depression through which the country has just passed. As one has written: "The prejudice against hiring workers past forty may have some justification in jobs that require unusual physical dexterity, but in many instances the attitude of employers has been harmful, not only to the individual and society, but to the employers themselves. Too frequently ability and experience are rejected in favor of enthusiasm and youth," with disastrous results to both the employer and the middle-aged man; while, on the other hand, we find many young men rejected for lack of experience which can only be acquired by middle age, after years of toil.

In this period of "social security" problems of various kinds, this question of middle-age

unemployment must be taken into serious consideration. Not only is the number of these middle-aged unemployed individuals rapidly increasing, but the social-security laws which have been suggested fail to bridge the gap between the age at which workers, however able they may be, find new opportunities denied them, and the age at which they become eligible for old-age pensions. The years between 50 and 60 may, in the near future, become years of despair.

With a distinct bearing upon this subject, a recent report on adult education by the University of Buffalo becomes signally significant. This report shows that, in the University's night classes, students 20 years old or younger received the *lowest grades as a group*. (The italics are ours.) After 20, the average grades improved in proportion to the age of the students, except for an inexplicable decline between the ages of 36 and 40. After 40, the grades again resumed their upward swing. "The inference to be drawn from these figures," says the report, "is that students of advanced age in this adult program are just as able to carry academic work as are their younger classmates."

Someone, commenting on this interesting fact, says: "Here, then, is a challenge. Science, by prolonging life, has presented society with millions of additional years of potentially productive man power. That power can be utilized and become a benefit; or it can be neglected and become a menace and a curse."

Every man in the capacity of employing others should bear these figures and facts in mind. A valuable social and economic asset is being discarded and destroyed, to the incalculable loss, not only of the men unjustly discriminated against, but to industry generally and to the nation at large.

W. A. N. D.

BEDSIDE AND LABORATORY DIAGNOSIS

It seems to me as illogical as it is futile to inveigh against laboratory medicine and extoll bedside methods and a return to the tactus eruditus. There is no real antagonism—in fact, no essential difference—between the two methods. There was a time when the clinical thermometer came as a revolutionary instrument to take the place of the hand in estimating the heat and cold of the human body. An English eye surgeon ranted against the "new fangled" instrument, the ophthalmoscope. Is there an instrument of precision, a laboratory test, an accurate measurement of dimension or function, which does not depend, in the last analysis, on our sense perceptions? There is every good reason why we should exercise our sight and hearing, our touch and sense of taste and smell, if only for the joy of healthy function, but in an emergency we do not walk or run or call for help, if we can jump into a car or send in a hurry call by 'phone or wire.—PERCY FRIFDENBERG, M. D., in N. Y. Physician, Feb., 1937.

THE SEMINAR

"A MONTHLY POSTGRADUATE COURSE"

(NOTE: Our readers are cordially invited to submit fully worked up problems to the Seminar and to take part in the discussion of any or all problems submitted.)

Discussions should reach this office not later than the 5th of the month following the appearance of the problem.

Address all communications intended for this department to The Seminar, care CLINICAL MEDICINE AND SURGERY, Waukegan, Ill.)

Problem No. 2 (Surgical?)

Presented by N. Odeon Bourque, M.D.,
Chicago

(See CLIN. MED. & SURG., Feb., 1937, p. 86)

RECAPITULATION: A healthy, robust, married woman of 23 years developed pain in the left hypochondrium, radiating to the back and thigh, which lasted for a week, when she had a chill, with a temperature of 103° F., and called for a doctor. The pain subsided, and then switched to the right hypochondrium; was accompanied by vomiting; and required morphine for relief.

On admission to the hospital, her temperature was 100.5° F., the entire upper abdomen was very sensitive, but not rigid, and the pain radiated to the back and right shoulder. There was a thick vaginal discharge, showing gram-negative intracellular cocci. The urine was rather highly acid and contained many pus cells. The uterus was small and movable. In the right pelvis there was a slightly sensitive, movable mass the size of a hen's egg. The left fallopian tube was palpable and slightly sensitive. A simple, flat roentgenogram showed nothing. Her leukocyte count was 18,000, with 80 percent of polymorphonuclears.

Requirement: Suggest diagnosis and treatment.

Discussion by E. C. Junger, M.D.,
Soldier, Iowa

Having been well always and a good feeder (nothing is said about her being a hard worker), her belching was probably due to overeating, which caused congestion of the stomach, liver, and gallbladder.

The tenderness in the left hypochondrium, with pain in the back and shooting down the thigh, could indicate kidney stone. The next attack, with pain in the right hypochondrium and vomiting, requiring morphine, looks like cholecystitis, probably with gallstones.

The thick vaginal discharge is serious for

the young wife, who is developing a pyosalpinx. The right tube being more involved than the left, and probably containing an abscess, the left may follow, like a quinsy—one side bad, the other side mild.

If the urine examined was a voided specimen, that would account for the pus; if catheterized, nephrosis in the left kidney pelvis is a possibility.

This patient needs rest in bed, hot douches and enemas, heat to the gallbladder, mild cholagogues, and liquids in large amounts, by mouth or rectum or intravenously. Codeine or morphine should be given only if absolutely needed. I would hold off from surgery for several weeks, until the acute symptoms in the tubes and gallbladder subside.

Discussion by G. M. Russell, M.D.,
Billings, Mont.

The symptoms in this case seem to have pretty well travelled around the circuit of the abdomen.

The four-day pain, with retching and vomiting, requiring two hypodermic injections of morphine to relieve it, suggests gallstone colic. The pain in the left hypochondrium was probably neuralgic in character. The doctor does not say whether, after the severe pain requiring morphine, there was icterus.

All perforations are ruled out, on account of lack of abdominal rigidity.

"In the lower abdomen" might mean anywhere from the umbilical line to the pelvis. The mass might be a cyst, ovarian or attached to the ovary by a pedicle; or it might be a tumor attached to any other organ in the lower right abdomen. It is difficult to reconcile this with the pain in the right hypochondrium. The patient had gonorrhea, of course, which might account for the high leukocyte count.

I should want a gallbladder roentgenogram, after the administration of dye (Graham test).

Tentative diagnosis: Cholelithiasis: cyst.

Treatment: Removal of the gallstones and the cyst; treatment of the gonorrhea by the methods commonly used.

**Discussion by Dr. W. C. Cummings,
Hopkinton, Iowa**

The young woman in this case appears to have had a gonorrheal infection. This has resulted in an infection of the fallopian tubes, with thickening of the left and pyosalpinx of the right.

It is noteworthy that this gonorrhea had caused no pain and apparently had not affected her health. It is reasonable to believe that when she called the doctor, her trouble was due to a cumulative explosion of the gonorrheal infection, or perhaps an infection with staphylococci, streptococci, or *Bacillus coli*, as a complication of this original trouble.

The pain and symptoms resemble gallbladder disease, but one would not expect gallstones in a woman so young, whose health and digestion had been good. Severe cholecystitis does not fit the case.

A ruptured ulcer of the stomach or duodenum would be accompanied by very sudden and severe symptoms.

From the history and the fact that there was pus in the urine, the trouble must be a pus infection of kidneys. This would explain the pain on both sides. Pyelitis alone would not explain so much pain; but if the accumulation of pus is sufficient to cause pressure, or if there is an obstruction of the ureter, or slight peritonitis from the kidney trouble, the pain could be accounted for.

As long as the patient is in fair condition, she should be kept in bed on a light diet and fairly free from pain. If, later, the right kidney needs to be drained or removed, the condition of the left should first be ascertained.

**Discussion by John Clark, M.D.,
Independence, Kans.**

Three functional systems are, on the surface, involved in this problem: the kidneys, the liver, and the female pelvic organs. I propose to consider all three of them.

The kidneys: There was pus in the urine, fever, and pain requiring opiates to relieve it. The pain radiated to the back and down the thigh, and was continuous. The second day there was a chill, followed by a temperature of 103° F.

Of the conditions that can be eliminated at once, the first is hydronephrosis, because, first, there is no tumor and there is no great daily difference of the quantity of urine passed. The one sure means of knowing exactly the condition of the kidney is a cystoscopic examination, with separation of the two urines. That would settle it.

The liver: The pain shifted to the right side, and was so severe as to require two doses of opiates to relieve it. These afforded relief for only eight hours. The pain radiated to the back and right shoulder; there was repeated retching and vomiting; and the area was sensitive to pressure.

The lower pelvis: The evidence presented excludes normal pregnancy, but extrauterine pregnancy requires consideration. There was a small, movable tumor on the right side. Can we reconcile the pain, fever, and vomiting with this form of pregnancy? I do not see that we can do so.

There are two things I have not yet mentioned. The gram-negative, intracellular cocci can cause all sorts of complications, and are, in my opinion, the chief cause of this woman's trouble. The high leukocyte count goes along with the salpingitis.

A negative family history means little. Negative histories are just negative histories, until they are credited or discredited.

**Discussion by R. L. Gorrel, M.D.,
Clarion, Iowa**

It is difficult to arrive at a diagnosis on the basis of this history, because it is so indefinite and incomplete. For instance:

1.—What was the *type* or *character* of this woman's pain? That is, was it colicky or persistent? Was it relieved by vomiting? etc.

2.—What was the menstrual history? If the periods had been irregular or had been replaced, at times, by "spotting," there is a slight possibility of an ectopic pregnancy. Was the mass reported in the "lower abdomen" actually in the pelvis? Gonorrhea may invade the uterus and fallopian tubes.

3.—Was there any tenderness over one or both kidneys?

4.—It is reported that there were pus cells in the urine. Was the specimen examined removed with a catheter? If not, it may have been contaminated by the vaginal discharge.

Without this and other similar information it is impracticable to arrive at a sound and logical diagnosis; and without that intelligent treatment is impossible.

Solution by Dr. Bourque

Cystoscopy disclosed pyelitis of the left kidney; the right kidney was normal. Gallbladder dye failed to reach the gallbladder.

Treatment: The pelvis of the left kidney was washed and a 2-percent solution of silver nitrate was instilled. Laparotomy, for exploration of the liver region, disclosed a distended gallbladder, the size of a medium-sized pear, with a solitary stone, the size of a large bean, obstructing the cystic duct. Cholecystectomy relieved all symptoms save the vaginal discharge, which is still under

treatment. The right-side tumor proved to be an ovarian cyst, probably not concerned in the symptoms present. The left-tube involvement was a mild attack of salpingitis.

Problem No. 4 (Medical)

Presented by George B. Lake, M.D.,
Waukegan, Ill.

THE patient was a young, unmarried woman of 25 years, whose chief complaint was "fainting spells." A carefully-taken family history was entirely negative. Her past history showed that she had been jaundiced at birth and at 14 years, but, in general, had been perfectly well except for a tendency to "bilious attacks," with a vague feeling of indigestion and sometimes moderate dizziness, nausea, and vomiting. After one of these attacks, 2 years before I saw her, an appendectomy was done, on the suspicion that it might be due to a mild case of appendicitis, though there was very little pain. Otherwise the history was normal and showed no cause for anxiety or worry.

Present illness: About one year after the appendectomy she began to have occasional spells of weakness, dizziness, trembling, sweating, and blurring of the vision, coming on about the middle of the morning or afternoon. These would pass off within two or three hours. As there seemed to be no objective signs of disease, her parents and two physicians who were consulted attributed the trouble to "nervousness."

About six months before she came to me, as she sat reading, one afternoon about 5:00 P.M., her mother noticed that her head fell forward in an abnormal position, and upon attempting to rouse her, she slipped to the floor, limp and unconscious. She was put to bed, and in a few minutes could answer

questions in a hazy manner, but she remained confused and somewhat stuporous for two days, though she ate her meals and attended to the calls of nature when urged to do so. There was no twitching, vomiting, nor loss of sphincter control.

After this she seemed well for three months, and then, in the early morning, her mother heard her groaning and muttering in her bed, and upon going to her found blood upon her lips, due to her having bitten her tongue. During the rest of the day she was mentally confused and drowsy, though ordinarily she was mentally bright and cheerful, except for a tendency to irritability in the late afternoon.

During the three months before I saw her she had had a number of the day-time attacks of dizziness, sweating, and trembling, and five of the nocturnal attacks, in one of which there was twitching and involuntary passage of urine. The patient had no recollection of these attacks in the early morning.

Physical examination (at 10:30 A.M.): The patient was a fairly well nourished and apparently normal young woman, except for a slightly anxious expression and a rather sallow and unusually moist skin. The pulse was 92 and the temperature normal. Careful examination of the lungs, heart, abdomen, pelvic organs, nose and throat revealed no abnormalities. All reflexes were normal, and there was no tremor; blood pressure, 110/72. Her urine was pale, specific gravity 1.014, otherwise normal. Her blood showed a negative Wassermann reaction; hemoglobin, 80 percent; leukocytes, 6,400; red cells, 4,100,000; differential count, normal.

Requirements: What is your tentative diagnosis? What further examinations would you suggest and what treatment would you prescribe?

A RABBIT CAN'T CLIMB A TREE

Pick up an ordinary cottontail rabbit and set it on a high branch of a tree and observe what happens. The rabbit promptly falls off, or it crouches and trembles in helpless terror.

Now observe the household cat in a similar position. It reclines at ease, unafraid, secure, and content.

Why the difference? The cat can climb up there by itself and the rabbit can't.

A man's ability to hold a big job is developed by the long and hard business of winning it. If he hasn't the capacity to win power, he hasn't the capacity to use it. Any man can mount a broncho with enough help, but the only man who can stay there is the one who can get on by himself.

ROBERT QUILLEN, in Fountain Inn Tribune, Feb. 11, 1937.

PRACTICAL KNOWLEDGE

There is nothing so practical in its values as accurate knowledge, and the pursuit of such knowledge has been most successful when not fettered with the initial demand that it be directed toward practical ends.—DR. KARL T. COMPTON.

CLINICAL NOTES and ABSTRACTS

Vasectomy*

VOLUNTARY male sterilization, or vasectomy, as a birth control procedure, is rapidly gaining a wide following in all parts of the world. The operation is simple, the result is permanent, fool-proof, does not unsex, nor is it injurious in any way to the physical or mental health of the individual.

Technic

Preliminary preparation includes shaving of the pubic and scrotal hair and a thorough cleansing with green soap. Merthiolate solution is used freely as a skin preparation. The usual acid and alcohol skin antiseptics should not be used, because of the hypersensitivity of the scrotum. A 3-grain capsule of Sodium Amytal is given a half-hour prior to the operation. Local anesthesia is sufficient. An assistant is preferred, though not necessary.

The operator stands on the left of the patient while working on the left vas, and vice versa for the right. The testicle is drawn downward by the left hand, and a careful examination is made with the right hand. The vas is easily identified by its hard, whiplike consistency. It is gently separated from the plexus of spermatic arteries and veins, and by gentle manipulation is pinned directly beneath the skin, and held securely by the thumb and index finger of the left hand. Care must be taken not to squeeze the vas at any time, in order to avoid causing uncomfortable reflex pains.

About 1 to 2 cc. of a 2-percent Novocain (procaine) solution is then injected directly into the skin and tissues adjacent to the vas. An incision of about a quarter of an inch is made deeply over the vas, and with a sharp curved medium fascia needle the vas is lifted out of the incision. A little nick is then made into the vas, cutting through the tunica vaginalis and the several layers of tissues covering the vas by a quick stroke. Scrotal tissues are particularly difficult to cut unless put under tension, and the knife must be exceedingly sharp. The fascia needle allows for a natural eversion of the coverings and for a perfect exposure of the vas, and is preferred over the use of Allis forceps or towel clips, as recommended by various operators.

The glistening vas is picked up again by

another needle. A mosquito hemostat is inserted directly beneath the needle and, by a gentle downward stroke, the vas is easily bared for about half an inch on each side. The vas is then positively identified, before proceeding, by three signs: its glistening appearance, the ease by which the covering is stripped away from it, and the presence of the artery which always accompanies the vas. The above procedure, if followed, precludes the possibility of a mistaken identity, which is not infrequent if the tube is cut and tied with its coverings attached.

The vas is then gently crushed on both sides and tied securely with softened No. 1 chromatic catgut. The structure of the vas is extremely delicate, and care must be taken in applying the ligature so as not to cut through the vas, thus leaving a patent tube. The vas is then cut between the two ligatures, the traumatized section excised and the ends cauterized with carbolic acid. An electric cautery may be used in cutting. The distal end of the vas is allowed to drop back into the spermatic sac, and the tiny slit in the tunica is located and closed with a single pursestring stitch, leaving the proximal end outside of the sac, thus interposing a layer of tunica between the cut ends. We have found no appreciable difference in about 50 cases where the proximal end alone was ligated, and we feel reasonably certain that the distal end closes spontaneously, if the closure of the proximal end is permanent. All oozing must be looked for and stopped, the scrotal tissues being particularly subject to embarrassing hematomas from the slightest bleeding. The skin incision is closed by a single dermal stitch.

The entire operation requires about fifteen minutes in a normal case. However, in an obese individual with a short and fat scrotum, the exposure is most difficult, complications occur frequently, and the operation should not be attempted unless the surgeon is thoroughly familiar with the procedure.

The period of disability is negligible. As a rule, our patients resume their usual occupation the following day. The stitches are removed on the third day and normal sexual function is allowed on the seventh day, provided other contraceptive methods are employed. Infections are rare, and are prone

*The Journal of Contraception, Oct., 1936.

to occur only when difficulty is encountered in exposing the vas, with the added trauma thus entailed. Our incidence of infection by this technic, although only dispensary or office types of asepsis are used, is less than 2 percent. There was one case of postoperative hydrocele and one of a hematoma. No cases of a true spermatocele were encountered in both the open and closed type of ligation.

Spermatozoon tests were obtained in 218 cases. We have obtained negative tests as early as three weeks following operation, and as late as six months. Tests for viability of the sperms, in our experience, are impracticable and the results so unreliable that our patients are advised to use contraceptives as long as sperms are identified in the semen. Our procedure is to dispense a dozen condoms to our patients, with a request that the twelfth or last specimen be brought in for examination. The average length of time it takes for the semen to become sperm-free is about two months. There were only two cases of proved failures by this technic, and these we attribute to faulty ligation.

Effects of Vasectomy

Approximately 85 percent of our patients were examined one year after operation. Out of 318 patients examined, only 2 felt that their sexual potency was impaired. Most of the group had noticed a decided improvement in their general health and a slight improvement or no change in their sex functions. There was no evidence of testicular atrophy in any of the patients examined. Thirty patients were examined after a five-year period, and the results were uniformly similar to those in the one-year group. Although the average age in this latter group was about 45 years, there was no evidence that the operation had in any way hastened the onset of impotency.

J. WINCY LAM, M.D.

Honolulu, Hawaii.

[Vasectomy is the so-called Steinach operation, which received a good deal of publicity a few years ago, and which appears to have satisfactory tonic effects, with occasional increase or restoration of potency, when performed on elderly men.—Ed.]

Look for **THE LEISURE HOUR** among the advertising pages at the back.

Diet after Gastric Ulcer Operations*

IN any case it is to be remembered that, even with the most radical resection, the so-called ulcer disposition, the nature of which has been extensively investigated by R. Balint and his collaborators, cannot be removed. This fact is not respected by some surgeons

when they discharge their patients with the instruction that diet is needed no more and that they are allowed to eat whatever they wish. This faulty conduct may be the cause, sooner or later, of reappearance of symptoms and eventual development of a postoperative ulcer, even in technically perfect and successfully treated cases. Concomitant inflammatory changes in the ulcer-bearing gastric mucosa are well known to the profession. The same are capable of maintaining complaints, and it would surely be a wrong practice to stabilize these changes by permitting an unrestricted diet.

If we counteract healing of inflammatory changes of the gastric mucosa by permitting an unrestricted diet, this will finally lead to an ulcer recurrence in some part of the stomach. Therefore it is absolutely necessary that the patient should adhere to certain dietary restrictions after operation and that he should arrange his life according to the principles of conservative management of ulcer disease. If surgeons will adopt these simple considerations, considerably better remote results of operative treatment of ulcer disease may be expected for the future.

EUGENE ROSENTHAL, M.D.

Budapest, Hungary.

Look over the Classified Ads
under "Business Opportunities."

Systolic Murmurs*

THE differentiation between accidental murmurs and those due to organic disease may be difficult during the latter months of pregnancy. The increased abdominal pressure displaces the diaphragm and heart upward and the apex of the heart outward, giving the appearance of enlargement of the heart to the left. A similar displacement occurs in increased intra-abdominal pressure from any cause, such as obesity, tumor or ascites. Under these conditions the enlargement of the left heart and the systolic murmurs simulate most closely the conditions in mitral insufficiency, which, except the functional type, is an extremely rare lesion. Also, examination of the dislocated heart fails to reveal the auricular enlargement and the accentuated pulmonic sound which are essential to the diagnosis of mitral insufficiency.

Systolic murmurs are very frequent in the presence of fever, and here also the toxemia may cause some dilatation of the heart. In acute rheumatic fever a systolic murmur is almost always heard during the acute febrile stage; but here, and in any infectious disease with an enlarged heart and a systolic murmur, a definite diagnosis of a valve lesion should be delayed until convalescence is well

**Rev. of Gastroenterology*, Dec., 1936.

**Bul. Evanston Br., Chicago M. S.*, Nov., 1936.

established. If organic valvular changes are present, the other evidences of valvular lesions will be found.

Systolic murmurs are commonly heard in exophthalmic goiter when the heart is beating rapidly. When there is marked cardiac dilatation, a functional mitral insufficiency may occur.

In severe anemias systolic murmurs are frequent over the precordium and especially over the veins at the base (venous humors). In the anemias, functional murmurs may also occur.

Cardiac respiratory murmurs, systolic in time, may be heard at any point over the precordium.

Because of the frequency of accidental systolic murmurs the diagnosis of heart disease, especially mitral insufficiency, upon the hearing of a murmur only, is likely to be incorrect.

J. H. Jackson says: "Never treat a patient on stethoscope evidence only. The heart may be a bad musical instrument yet a good force pump. However noisy the first sound may be at the base of the heart, if the apex be in the right place, if there be no signs of hypertrophy, no anemia, if the pulse be good, and above all if the patient does his work well, we have nothing to treat."

DON C. SUTTON, M.D.

Chicago, Ill.

Look for **FACTS AND COMMENTS** among the advertising pages at the back.

Abdominal Pain Due to Extra-Abdominal Disorders*

EXTRA-abdominal disorders that may cause pain in the abdomen may be listed as follows:

Thoracic Diseases: (1) Coronary occlusion; (2) angina pectoris; (3) subacute bacterial endocarditis; (4) right-sided heart failure; (5) aneurysm; (6) pericarditis; (7) basal pleurisy; (8) pneumonia; (9) pulmonary tuberculosis; (10) diaphragmatic hernia.

Urogenital Diseases: (1) Pyelitis; (2) pyelonephritis; (3) ureteral stricture; (4) ureteral calculus; (5) renal calculus; (6) hydronephrosis; (7) renal ptosis; (8) prostatovesiculitis; (9) epididymitis; (10) urethritis.

Acute Infectious Diseases: (1) Rheumatic fever; (2) measles; (3) typhus; (4) septicemia; (5) influenza; (6) follicular tonsillitis; (7) scarlet fever; (8) undulant fever; (9) typhoid fever.

Toxic Conditions: (1) Uremia; (2) lead; (3) tobacco; (4) mercury; (5) emetine; (6) arsenic; (7) arachnidism; (8) food poisoning; (9) diabetic coma.

*J. Med. Assn. Ala., Aug., 1936.

Cerebral Diseases: (1) Acute epidemic encephalitis; (2) abdominal migraine; (3) epileptic equivalent; (4) hysteria—"fears, worries, conflicts, maladjustments, repressions, inhibitions, and general emotional instability" (Paullin).

Diseases of the Spine and Spinal Cord: (1) Intercostal neuralgia; (2) cord tumor; (3) tabes dorsalis; (4) transverse myelitis; (5) osteoarthritis; (6) osteomyelitis; (7) tuberculosis of the spine; (8) scoliosis; (9) herpes zoster; (10) psoas abscess.

Pain of Abdominal Wall: (1) Intercostal neuralgia; (2) fibromyositis; (3) epigastric hernia.

Endocrine Disorders: (1) Thyroid; (2) pituitary; (3) Addison's disease.

Allergic Causes: (1) Migraine; (2) Henoch's purpura; (3) angioneurotic edema.

Miscellaneous: (1) Arteriosclerosis; (2) periarteritis nodosa; (3) syphilis; (4) cancer of retroperitoneal glands; (5) rectal neoplasm; (6) pelvic disease.

J. M. MUSSER, M.D.

New Orleans, La.

Therapy in Acute Rheumatic Fever*

THE study of 200 cases of acute rheumatic fever shows that there is great advantage in giving a large initial dose of either sodium salicylate (up to 40 grains) or amidopyrine (15 to 20 grains) to such patients. Analysis shows that 114 patients (57.8 percent) had a normal temperature in five days or less. There were 17 other patients who had a normal temperature on either the sixth, seventh or eighth day. Seventy-three (73) had a normal temperature at the end of five days without a clinically demonstrable lesion of the heart. Ten patients without a normal temperature in five days did not have a clinically demonstrable heart lesion.

The number of patients who can escape without cardiac damage during an attack of acute rheumatic fever, unless the temperature is reduced to normal in a few days, is so small as to be practically negligible.

The study shows that the initial dose of sodium salicylate should be not less than 25 grains. The best results are obtained from 40-grain doses. The greatest value is to be obtained by giving 20 grains of amidopyrine as the initial dose.

J. ARTHUR BUCHANAN, M.D., and
JOSEPH C. INDELICATO, M.D.

Brooklyn, N. Y.

I hope I shall never be without "C.M.&S.," for it is to me the most refreshing of all the medical journals for the general practitioner.—W. E. W. T., M.D., Mich.

*Med. Record, Oct. 7, 1936.

Insulin in Duodenal and Peptic Ulcers*

INSULIN was administered, in doses of from 3 to 20 units, three times a day, with orange juice to prevent reactions, to 20 duodenal and peptic ulcer patients, who had received no relief from dietary regime, with the following results.

1.—Early cases were completely relieved of all symptoms, and while observed showed no recurrences. They were classified as clinically cured, although roentgen-ray examinations still showed duodenal cap deformity.

2.—Recurrent cases were, in the main, greatly improved. One case was called clinically cured. Roentgen-ray examinations showed duodenal cap deformities in all cases as long as they could be followed.

3.—Complicated cases showed marked improvement in symptoms reported. One patient was discharged as clinically cured and has been followed for 20 months, with no recurrence except a recent loss of appetite.

4.—Insulin has a pronounced effect on all symptoms of duodenal ulcer patients. It either completely relieves or else causes a vast improvement in the symptoms.

5.—It is difficult to explain the persistence of positive roentgen-ray findings in clinically cured patients who have had no recurrence of symptoms.

6.—One gastric ulcer (malignant) reported relief from pain and increased appetite. Pyloric stenosis nullified the insulin beneficial effects.

7.—In the older group of complicated ulcers the patients were in many cases saved from major surgical procedures and restored to a useful existence. Insulin, therefore, offers a medical solution to the treatment of apparently hopeless cases that have been marked for surgery.

PERRY SPERBER, M.D.

Providence, R. I.

Breast Feeding

MANY more infants, in general, could be completely breast fed with a little special care. The first week is the crucial period. At the Presbyterian Hospital I have emphasized the necessity of having the infant repeatedly put to the breast for this period, and have found that few mothers are physically unable to nurse their children. The difficulties that arise and failures that are reported are most frequently the results of faulty technic. A common one is to add complementary feedings, to quickly replenish the original weight loss—a dietary mirage! Another is the early teaching of the infant to feed from a bottle. To overcome this I have all infants fed *nothing* from a bottle, in an endeavor to

make them nurse more effectively. Water that is needed the first few days of life is given by a medicine dropper. These procedures have convinced me that a surprisingly small number of mothers are unable to nurse their children.

The incidence of illness among the 20,000 infants studied was compared. There were infections in 37.4 percent of the breast fed group; 53.8 percent of the partially breast fed group; and 63.6 percent of the artificially fed group.—CLIFFORD G. GRULEE, M.D., in *Bul. Evanston Br. Chicago M. S.*, Mar., 1937.

State Medicine is poorhouse medicine.
Tell your patients.

Simple Milk Mixtures in the Feeding of Premature Infants

DURING the past few years, 16 consecutive infants, weighing less than four pounds at birth, have come under our care. Simple mixtures of cows' milk with 8 to 17 percent of added carbohydrate, in the form of dextrin-maltose No. 1, and 1 to 3 percent added protein, in the form of calcium caseinate, have been found highly satisfactory in the feeding of premature infants. Such mixtures with high caloric values, caused an average gain of one ounce daily from the low point in 6 premature infants whose average birth weight was three pounds two ounces. The average period of observation in the hospital from the low point was fifty-three days.—DR. ABRAHAM TOW, of New York City, in *New York St. J. Med.*, Oct. 1, 1936.

Iodized Ointment in Wound Treatment*

AS a dressing, to be used after the cleansing (and, if necessary, draining) of actually or potentially infected wounds, where there is objection to the employment of the irritating antiseptics, such as bichloride of mercury solution or tincture of iodine, I have found an iodine-carrying ointment, known as Iodized Dionol, very convenient and effective.

This ointment, due to its special base, melts readily at the temperature of the body, and thus enters the depths of the wound, where it does not in the least interfere with the escape of discharges and secretions. Laboratory tests have proved that it is definitely bacteriostatic, but apparently not bactericidal. It has no toxic nor irritating effect on the tissues, and promotes wound healing. Since iodine and all its compounds induce leukocytosis, it is probable that the value of

**Rev. of Gastroenterology*, Dec., 1936.

**Med. World*, Jan., 1937.

this dressing is due, in part, to stimulation of the body's natural defenses.

E. BENDIX HASSELRUP-HANSEN, M.D.
Buenos Aires, Argentine.

Electric Light Bulb in the Rectum

(A Case Report)

A GENTLEMAN, age 50, came to me this morning with a fifty-watt electric light bulb in his rectum, which had been there all night and caused much pain. It seems he wanted to dilate his rectum, as he was suffering from constipation, so he pushed the socket-end of the bulb in first and, pushing it in forcibly, it slipped into his rectum. When I saw him, the bulb was about six inches up in the rectum.

I used a local anesthetic, dilated the rectum, and, after using different small retractors, I finally pulled it down with an adenoid curette and, by turning it in the rectum so that the socket-end came first, finally extracted it with my fingers.

Have any of your readers heard of such a case? And if so, how was the bulb extracted without breaking it? I had to exercise every precaution in order not to break the bulb.

W. FRANCIS ERTLE, M.D.

Kalamazoo, Mich.

[In the February, 1936, issue of "C.M.&S.," on page 92, we published an abstract of a report of a man who had inserted a half-pint whisky flask into his rectum; and of another, whose physician had recommended the use of cold cream and lemon juice in the treatment of hemorrhoids, who carried out that suggestion by introducing into his rectum a whole lemon, set in the mouth of a three-ounce jar of cold cream. Both of these obstructions were removed without serious damage to the offended parts.

Dr. Ertell's case presented a more difficult problem, because of the fragility of the foreign body, and once more demonstrates the degree to which the rectum can be distended without serious danger to the patient.—Ed.]

Birth Control and Population

AS contraceptive knowledge becomes democratized, the population of the United States will become stationary, about 1950, at a level approximating 150 or 160 million. After that there may be a slight decline. This prospect has raised a crop of "professional depopulators." A number of population authorities, whose names rightly carry great weight, are misleading the people to accept the notion that there is grave danger of depopulation.

That the populations of the United States and of northern and western Europe are

"doomed to die out" is a figment of the imagination. It is based on a statistical fallacy, on the fanciful extrapolation of trends toward stabilization just beginning. There is no more danger of underpopulation today than there was of overpopulation in 1820. The population of the United States is increasing nearly one percent per annum.

We need not fear a stationary population. It has been the typical situation in history. Nothing like the phenomenal growth of the nineteenth century has ever happened before. We mistakenly view that situation as normal, and we are psychologically adjusted to it. But we shall be compelled by circumstances to readjust our thinking.—NORMAN E. HIMES, Ph.D., Prof. Sociology, Colgate Univ., in *Birth Control Rev.*, Nov., 1936.

Calcium Thiosulphate in Arspenamine Complications*

OF 6 severe cases of arspenamine dermatitis, 4 were treated solely with intravenous injections of calcium thiosulphate, the dermatitis being clear in an average of 22 days.

The remaining 2 cases were treated first with intravenous injections of calcium thiosulphate, and later, owing to difficulties in making the injections, with intramuscular injections of calcium gluconate. One of these was completely clear in 40 days; the second died on the 36th day after the onset of the dermatitis: the skin had markedly improved; postmortem examination showed acute ulcerative colitis.

Six (6) milder cases of exfoliative dermatitis were clear in an average of 14 days. One case of post-arsenobenzol purpura was discharged convalescent on the fifth day.

Three (3) cases of jaundice cleared in an average of 14 days. Perhaps the most striking effect of calcium therapy in these patients was the relief of symptoms, especially the mental depression accompanying the condition.

Two cases of bismuth dermatitis cleared up in 22 and 10 days, respectively.

In two instances, urticarial reaction, a sign of early intolerance to arspenamine, was controlled, and arspenamine administration continued without ill effect.

Calcium thiosulphate has proved of definite curative value in the treatment of the sequelae of the arspenamine-bismuth therapy of syphilis, and in doses of from 0.45 to 0.9 Gm. (4.1 to 9 cc. of a 10-percent solution), for an adult of average weight, has proved non-toxic.

A. E. W. McLACHLAN, M.B.

London, England.

**J. Chemotherapy*, Jan., 1937.

DIAGNOSTIC POINTERS

Errors in Six Consecutive Cases of "Appendicitis"

OF 6 consecutive cases, sent to hospital with the diagnosis of appendicitis, the first case proved to be a stone in the right ureter; the second, acute alcoholism; the third, a ruptured spleen; the fourth, hookworm disease and constipation; the fifth was correctly diagnosed after the unforgivable administration of a purgative; and the sixth, which was operated upon, was probably mild entero-colitis plus hookworm disease.—W. H. MICHAEL, Commander, M. C., U. S. Navy, in *U. S. Nav. Med. Bull.*, July, 1936.

Paroxysmal Hemoglobinuria

IN a typical case of paroxysmal hemoglobinuria the patient, a male adult, was never incapacitated and only a single voiding of urine was ever discolored; the vasomotor phenomena, such as Raynaud's syndrome and urticaria, were not observed. The presence of syphilis was proved. A constant leukocytosis remains unexplained.—J. G. DICKSON, Lt. Com., M. C., U. S. N., in *U. S. Nav. Med. Bull.*, July, 1936.

Electric Currents of the Body

LIVING organisms do possess direct-current characteristics. These can be measured with accuracy sufficient to make possible mathematical treatment. The potential differences are not chaotic, but produce organized electrical fields.—DRS. BURR, LANE, and NIMS, in *Yale Journ. of Biol. and Med.*, Oct., 1936.

Dyspepsia and Cancer

THE onset of persistent dyspepsia, in a person more than 40 years old, should be regarded as due to carcinoma until the contrary can be proved.—SIR JAMES WALTON, in *Lancet* (Lond.), May 16, 1936.

Gout

GOUT is much more common today than is generally believed, and should be thought of in all joint cases and differentiated from arthritis. The treatment of gout is relatively easy.—ABRAHAM COHEN, M.D., in *South. M. & S.*, Dec., 1936.

Tests for Syphilis

THE clinician will obtain equally valuable information from the results of efficiently performed complement fixation or flocculation tests for syphilis. If two tests are to be performed, it is immaterial whether two complement fixation tests or two flocculation tests are performed, or whether one of each kind is used.—Reprint No. 52 from *Veneral Disease Information*, U. S. P. H. S.

Multiple Sclerosis and Encephalitis

MULTIPLE sclerosis is probably a stage or variety of encephalomyelitis of virus origin. Moreover, there are many subclinical and atypical cases of encephalitis.—DAVID C. WILSON, M.D., before Southern Med. Assn., Nov., 1936.

Heredity and Disease

HEREDITY counts, and the stuff of which men and women, boys and girls, are made from the ears up, in the end means as much to the adequate solution of the disease problems of the world as does their physical integrity from the ears down.—J. H. STOKES, M.D., Philadelphia, Pa.

Benzedrine and Intelligence Tests

AFTER administration of 20 mg. of Benzedrine Sulphate, Cattell's "intelligence tests" were given to a group of people. The results showed an increase in score of over 8 percent, as compared with previous tests without Benzedrine. The score of a control group receiving placebos remained unchanged.—DRS. WM. SARGANT & J. M. BLACKBURN, in *Lancet* (Lond.), Dec. 12, 1936.

Bone Symptoms in Leukemia

THE outstanding signs in some leukemias may be: pain around the joints, resembling rheumatic arthritis; pain in the long bones, as in osteomyelitis; periosteal reactions, as in scurvy, periostitis, or syphilitic periostitis; spontaneous fracture, in osteolytic processes; bulky tumors of single bones; or osteolytic lesions, as in myeloma or chloroma.—CHARLES L. CONNOR, M.D., in *A. J. of Cancer*, Jan. 1937.

NEW BOOKS

Any book reviewed in these columns will be procured for our readers if the order, addressed to **CLINICAL MEDICINE AND SURGERY**, Medical & Dental Arts Bldg., Waukegan, Ill., is accompanied by a check for the published price of the book.

All increase of knowledge is the adding of one to one—the unfamiliar to the familiar; the new to the old.—ERNEST WOOD.

Individual Psychology

INTERNATIONAL JOURNAL OF INDIVIDUAL PSYCHOLOGY. Alfred Adler, Editor-in-Chief. Published Quarterly. Chicago: International Publications, Inc., Publishers. Price, single copies \$1.50; per year (4 numbers) \$5.00.

It is rarely that periodicals are discussed in this department, but in this instance that is the only rational way to handle the matter, as each issue of this "Journal" is a substantially bound and beautifully made volume, ready to be placed on the library shelves just as it is.

This, then, is a review of Volume I (four numbers) of this periodical for 1935, and will serve as an introduction to the reviews of subsequent numbers, as they appear.

Dr. Adler, who first used the phrase, "inferiority complex," was formerly an associate of Freud, but soon discovered the inconsistencies and oneness of the strict Freudian dogmas and, after much thought and study, evolved his own school of Individual Psychology, in which the ego-urge—the "will to power"—takes the place of Freud's pansexual urge. In Adler's scheme the sole object of study is to determine the individual's style of life—is he a "ruler," a "getter," an "avoider," or a "social cooperator and contributor"—and the way in which he follows that style. Only those in the last-named group are considered to be wholly normal individuals.

In his introduction to the first number of this Journal, Adler states: "Heredity only endows him (the individual) with certain abilities. Environment only gives him certain impressions. These abilities and impressions, and the manner in which he 'experiences' them—the interpretation he makes of these experiences—are the bricks which he uses, in his own 'creative' way, in building up his attitude toward life."

As in other "systems" or "schools" of psychology and psychiatry, there is a jargon, or specific nomenclature, in the Adlerian school, which the student must master before he can read the writings of the adherents of that school with ease and full enjoyment and profit. This, however, is not a difficult feat, and should deter no one from obtaining the

very practical help which can come from a study of these documents.

Those who have the back numbers of "C.M.&S." will do well to refer to the review of Adler's book, "What Life Should Mean to You," which appeared in our issue for July, 1932, on page 554. A reading of that book should serve as a practical introduction to the material presented in the periodical under review.

In the four numbers composing Volume I, will be found such illuminating contributions (all by followers of the Adlerian School in various countries, with articles by Adler himself in every issue, all foreign papers being translated into English) as: "Homosexuality as Neurosis"; "Functional Disturbance of the Digestive System"; "Development of Character"; "The Structure of Neurosis"; "Phobia as an Expedient"; "Psychology and Morals"; "The Pessimistic Attitude"; "The Choice of a Mate"; and many others, a large number of which are detailed case reports, from the Adlerian standpoint.

No psychiatrist or psychologist, of whatever school of thought, can afford to miss the mental stimulus and real, practical help which these quarterly volumes will bring; and any general practitioner who will take the time to familiarize himself with the basic concepts and phraseology of Adler's work, and will then study these volumes carefully, will be astonished at the increase in his grasp and power in dealing with that type of patients who make up more than half of the practice of every active clinician not strictly specializing as an operating surgeon.

Sherman: Food and Nutrition

CHEMISTRY OF FOOD AND NUTRITION.

By Henry C. Sherman, Ph.D., Sc.D., Mitchell Professor of Chemistry, Columbia University. Fifth Edition, Completely Rewritten. New York: The Macmillan Company. 1937. Price, \$3.00.

Sherman's book has become a standard, which is in constant use by dietitians, biochemists and food laboratory workers; for the student of nutrition it is a *vade mecum*. This (fifth) edition has been completely rewritten, to keep pace with the constantly advancing knowledge of the topics dealt with; however,

the author carefully points out that much of our knowledge regarding the processes of nutrition are still theoretical and must be accepted with reserved judgment.

There are 27 chapters and 4 appendices. Fats, proteins, minerals, vitamins, are all concisely but adequately discussed. Chapters VII and IX, dealing with metabolism, and Chapters XVII to XXII, dealing with the vitamins, are particularly well written and supply the latest acceptable investigations on these topics. Chapter XXIV, covering dietary standards, should also be found very interesting.

The suitability of food for the maintenance of health and in the treatment of disease is of paramount importance to every practicing physician; it is of special significance to those who guard the growth and development of the young. Here will be found the fundamental facts governing the chemistry within the body, of metabolism, digestion, and the disposal of wastes. These basal facts are presented in a way in which they are easily comprehended and assimilated.

Extensive bibliographies are provided throughout the book, for those who may desire more extensive study of the matters dealt with.

This is a volume which, apart from its special purposes, should be on the bookshelf of every general practitioner. It is well printed, handy in size, completely indexed, and the price is very reasonable.

Miller: The Lung

THE LUNG. By William Snow Miller, Emeritus Professor of Anatomy, University of Wisconsin. Springfield and Baltimore: Charles C Thomas. 1937. Price, \$7.50.

Never before has such a complete and detailed description of the gross and microscopic anatomy of the lung appeared under one cover. The author has spent many years in the laboratory and library research whose fruits are presented in these pages. There are 152 illustrations, a number of which are original and 20 of which are in colors, so that the student finds clear and informative pictures, as well as descriptions, of every detail of the structure of this important organ. The bibliography contains 222 references. The bookwork is beyond criticism and the index is ample.

This monograph will be indispensable to anatomists and to teachers and demonstrators of anatomy and histology, and of great value to clinicians who specialize in diseases of the respiratory organs.

Major: Physical Diagnosis

PHYSICAL DIAGNOSIS. By Ralph H. Major, M.D., Professor of Medicine in the University of Kansas. 427 Illustrations. Philadelphia and London: W. B. Saunders Company. 1937. Price, \$5.00.

As stated by the author, this book is a summary of some of the things he has learned in fifteen years' experience in teaching phys-

ical diagnosis to medical students; it is intended as a textbook of this subject and attempts rather the paths of exploration by the senses which the student should follow, as well as suggesting some byways that he may explore as the interest of the moment indicates.

The original descriptions of the older masters of clinical diagnosis are quoted freely by the author and, in many cases, the illustrations given by these pioneers are reproduced. These are given because they serve as models for the student, which are not surpassed even at the present day; they lend a unique interest to the book and rob the subject of much of its dryness.

There are 21 chapters which are arranged generally according to regions and organs.

The bookwork is excellent and there is an ample index.

This work is recommended to students and teachers as a concise and practical exposition of the art of physical diagnosis, combining the best methods of both past and present.

International Clinics

INTERNATIONAL CLINICS. A Quarterly of Illustrated Clinical Lectures and Especially Prepared Original Articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene, and Other Topics of Interest by Leading Members of the Medical Profession Throughout the World. Edited by Louis Hamman, M.D., Visiting Physician, Johns Hopkins Hospital, Baltimore, Md. Volume IV, Forty-Sixth Series, 1936. Philadelphia, Montreal and London: J. B. Lippincott Company. Price, \$12.00 per year, 4 issues.

The December, 1936, quarterly issue of *International Clinics* contains 17 contributions on general clinical medicine and 2 review articles on dermatology.

Dr. Jacob Schloss opens with a thorough review of gastroscopy. He shows that the most important clinical problem in gastric diseases at present is that of finding dependable correlations between symptoms, dysfunction, and anatomic change. Gastroscopy by the newer improved methods has great potentialities in this direction and will probably increase in importance as a clinical procedure.

Other papers of particular clinical importance are: "The Medical Aspect and Treatment of Chronic Gallbladder Disease," by Dr. George M. Piersol; "The Bedside Recognition and Treatment of Cardiac Irregularities," by Dr. Samuel A. Levine; "Certain Observations Concerning Hypertension and Its Treatment" by Dr. E. J. G. Beardsley; and the "Treatment of Emphysema," by Dr. H. L. Alexander.

Dr. Piersol's article deals especially with those cases of gallbladder disease that are clearly more suitable for medical than surgical management. Dr. Levine discusses the signs that may be elicited at the bedside to enable the average physician to recognize

most of the important irregularities and disturbances of the heart beat. Dr. Beardsley is of the opinion that, with hypertensive patients, measures other than drugs are much more helpful than the majority of the new and old therapeutic remedies. Intelligent sympathy and true kindness on the part of the physician are needed. Dr. Alexander shows that asthma and chronic bronchitis are the chief causes of pulmonary emphysema; it is possible to recognize the condition in its early stages and treatment at this period is efficacious.

Morris: Postoperative Exercises

MATERNITY AND POST-OPERATIVE EXERCISES. In Diagrams and Words. By Margaret Morris, C.S.M.M.G., in Collaboration with M. Randell, S.R.N., S.C.M., T.M. M.G. (Twenty-one Exercises) New York: Oxford University Press. 1936. Price, \$2.00.

This book gives full descriptions, with illustrative drawings, of twenty exercises, most of which are suitable for expectant and nursing mothers, and for postoperative conditions. There are also special "pelvic-joint stretching," "labor," and "delivery" exercises, to train the expectant mother in the use of the muscles which come into action at the birth of her child, as well as to accustom her to the position in which the child is born, thus gaining her cooperation.

Most of the exercises, because they are performed in horizontal and sitting positions, will also be found very useful in general debility following illnesses. The exercises are carefully graduated from "lying" to "standing," the harder ones being added as the patient's strength improves. Special attention is given to training in deep breathing and relaxation, as well as to establishing good posture, which is so essential to bodily efficiency.

Every physician who deals with surgical or obstetric patients will find this little volume immensely helpful in giving such patients the personal instruction which is so large a factor in success as a clinician and in the building of a sound and lucrative practice.

Tow: Diseases of the Newborn

DISEASES OF THE NEWBORN. By Abraham Tow, M.D., Adjunct Professor of Pediatrics, New York Polyclinic Hospital and Postgraduate Medical School; Assistant Adjunct Pediatrician of the Abraham Jacobi Division for Children of the Lenox Hill Hospital; Fellow American Academy of Pediatrics; Fellow in Pediatrics, New York Academy of Medicine. New York: Oxford University Press. 1937. Price, \$6.50.

During the past decade or more there has been, in all civilized countries, a tendency to shift the onus of the care and treatment of the newborn from the obstetrician to the pediatrician; a very voluminous literature has accumulated dealing with the various aspects of the subject.

The author is a distinguished pediatrician

with many years of clinical experience in the pediatric service of the New York hospitals. His book is not, however, intended for pediatricians alone; it is a clinical one which attempts to organize the vast material available and to present it in such a fashion that it will be of service to the general practitioner, who not only delivers his babies, but is also responsible for their after-care; to the obstetrician, who may find in the pages items of interest that will help him in reducing the incidence of fetal morbidity and mortality; and to the pediatrician, who may discover there something that will be of value in his dealing with the fascinating problem, the newborn infant.

There are 15 chapters which cover the examination and care of newborn infants and the treatment of the special defects and diseases to which they are subject. Ample bibliographic references are given at the end of each. Illustrations are furnished where needed. The typography is good.

The work is recommended to the practitioners mentioned above as a practical one, written by one thoroughly experienced in the subject.

Miles and Wilkie: Operative Surgery

OPERATIVE SURGERY. By Alexander Miles, M.D., LL.D., F.R.C.S. Ed., Consulting Surgeon, Royal Infirmary, Edinburgh; and D. P. D. Wilkie, M.D., F.R.C.S. Ed. and Eng., Professor of Surgery, University of Edinburgh. Second Edition. With 329 Illustrations. Oxford University Press, London: Humphrey Milford. 1936. Price, \$7.25.

This short textbook may be taken, in a general way, to represent the present-day practice of operative surgery in the Edinburgh School. It is a manual for students. The authors say that they have not attempted to cover adequately the whole subject, but have been content to provide for the needs of undergraduates, who require a guide to their studies in the class of operative surgery and in the hospital, and of young graduates who may be called upon to undertake operative work as house surgeons or in practice.

The methods selected for description are those most generally favored by the collaborators of the authors who write these descriptions. They include all the important basic surgical operations of common practice. The book seems to have fulfilled the authors' aim, as a second edition has been found necessary within three years.

Sachs: Child Training

KEEPING YOUR CHILD NORMAL. Suggestions for Parents, Teachers and Physicians; with a Critical Estimate of the Influence of Psychoanalysis. By Bernard Sachs, M.D., Former President, New York Academy of Medicine; President, First International Neurological Congress, Berne, 1931; Director of Child Neurology. New York: Paul B. Hoeber, Inc. 1936. Price, \$1.50.

Common sense judgment, plus intelligent practices and a cognizance of the values of

the homely virtues—here is the simple formula for the successful guidance of the normal child through childhood and adolescence. Parents and teachers may well devote sober thought to this counsel, for the character and personality development of the child are directly dependent on their influence.

Dr. Sachs is vehement in protest against the too-common modern practice of subscribing to fads and cults because "they happen to be in the vogue." Misinformation and distorted truths make our potentially normal children the victims of subversive practices and pernicious set-ups. In discussing "The Uses and Abuses of Psychoanalysis," Dr. Sachs analyzes and criticizes doctrines and theories, and points out their fallacies and dangers.

This book is written from a practical and conservative viewpoint. The subject matter is timely: concrete problems are considered, and case instances cited. The style of writing is sincere and direct; the vocabulary clear and free from technical terms. For serious-minded persons—parents, teachers, physicians, social workers, and everyone interested in child welfare—it offers something of sound practical value. Physicians can safely recommend it to mothers and teachers, and most

of them can get a good deal of help out of it for themselves.

S. W.

Davis, Salmonsens & Earlywine: Silicosis

THE PNEUMONOKONIOSES (SILICOSIS). Literature and Laws of 1934. International Abstracts, Extracts and Reviews of the Pneumonokonioses and Their Associated Diseases and Subjects. By George G. Davis, M.D., Associate Clinical Professor of Surgery, Rush Medical College, University of Chicago, etc.; Ella M. Salmonsens, Medical Reference Librarian, John Crerar Library, Chicago; Joseph L. Earlywine, Attorney at Law, Chicago. Chicago: Chicago Medical Press. 1935. Price \$7.50.

This volume contains a digest of the literature (abstracts, extracts, and reviews) and laws relating to the pneumonokonioses (silicosis), which have appeared throughout the world in 1934. Foreign articles are abstracted in English. The bibliography and index are exhaustive.

This book is indispensable to industrial physicians, to lawyers, and to those concerned with industrial insurance. It is purely a reference work.

New Books Received

The following books have been received in this office and will be reviewed in our pages as rapidly as possible.

THE DIAGNOSIS AND TREATMENT OF ARTHRITIS. By Russell L. Cecil, M.D., Sc.D. Reprinted from Oxford Monographs on Diagnosis and Treatment. Henry A. Christian, M.D., Sc.D., LL.D., General Editor of the Series. New York: Oxford University Press. 1936. Price, \$4.75.

THE DIAGNOSIS AND TREATMENT OF DISEASES OF THE STOMACH AND INTESTINES. By William Fitch Cheney, B.L., M.D. Reprinted from Oxford Monographs on Diagnosis and Treatment. Henry A. Christian, M.D., Sc.D., LL.D., General Editor of the Series. New York: Oxford University Press. 1936. Price, \$5.50.

THE DISEASES OF INFANTS AND CHILDREN. By J. P. Crozer Griffith, M.D., Ph.D., and A. Graeme Mitchell, M.D. 2nd Edition, Revised and Reset. Philadelphia and London: W. B. Saunders Company. 1937. Price, \$10.00.

CANCER AND DIET. With Facts and Observations on Related Subjects. By Frederick L. Hoffman, LL.D. Baltimore: The Williams & Wilkins Company. 1937. Price, \$5.00.

OPERATIVE SURGERY. By J. Shelton Horsley, M.D., LL.D., F.A.C.S., and Isaac A. Bigger, M.D. 4th Edition. In Two Volumes. St. Louis: The C. V. Mosby Company. 1937. Price, \$15.00.

INTERNATIONAL CLINICS. Edited by Louis Hamman, M.D. Volume I, 47th Series, March, 1937. Philadelphia: J. B. Lippincott Company. 1937. Price, \$3.00, current year (not sold separately); \$5.00, back years.

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THE OPERATIONS OF SURGERY. By R. P. Rowlands, M.S. Lond., F.R.C.S. Eng., and Philip Turner, B.Sc., M.S. Lond., F.R.C.S. Eng. 8th Edition. Volume II. Baltimore: William Wood & Company. 1937. Price, \$10.00.

HAY FEVER. With Special Reference to Treatment by Intranasal Ionization. By Clive Shields, B.M., B.Ch. Oxon. New York: Oxford University Press. 1937. Price, \$2.50.

ENDOCRINOLOGY. Clinical Application and Treatment. By August A. Werner, M.D., F.A.C.P. Philadelphia: Lea & Febiger. 1937. Price, \$8.50.

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Information on Vitamins

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This article contains, in a brief compass, a large amount of pertinent and valid information regarding the vitamins, which every physician needs to enable him to talk intelligently to his patients and others about these substances.

A complete reprint of this article will be sent in response to a request (a postcard will do) addressed to CLINICAL MEDICINE AND SURGERY, Waukegan, Ill.

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